

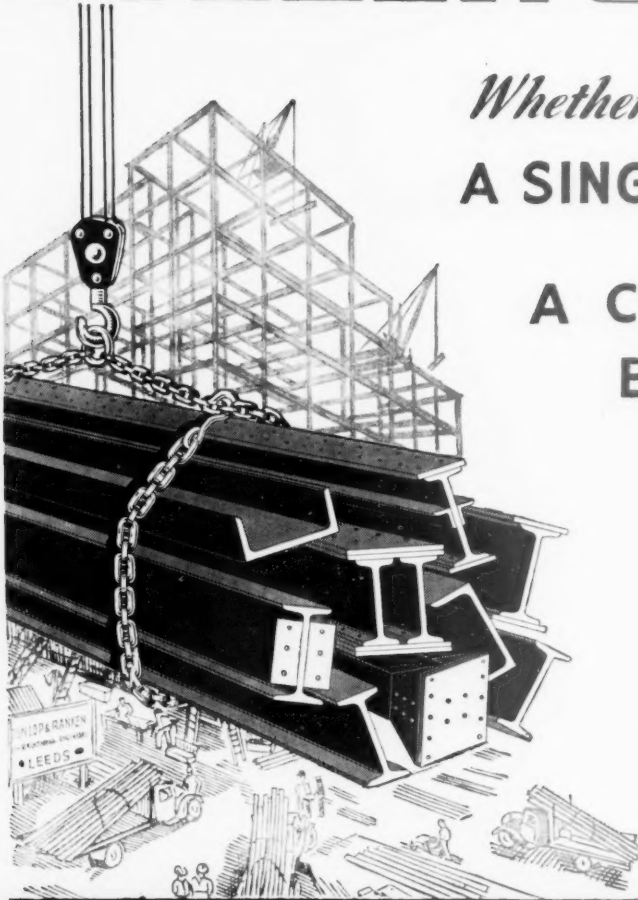
THE
ARCHITECT
& BUILDING NEWS

IN THIS ISSUE

- SWINTON FITZWILLIAM INFANTS' SCHOOL
- NEW PRINTING WORKS, NOTTINGHAM
- CURRENT MEASURED RATES

FEBRUARY 2, 1951 · VOL 199 · NO 4285 · ONE SHILLING WEEKLY

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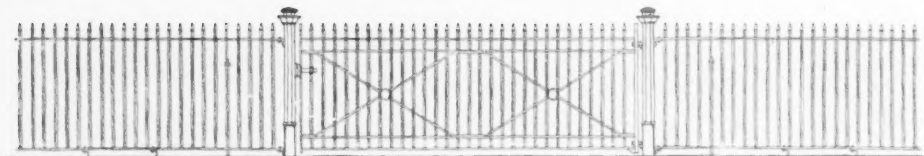
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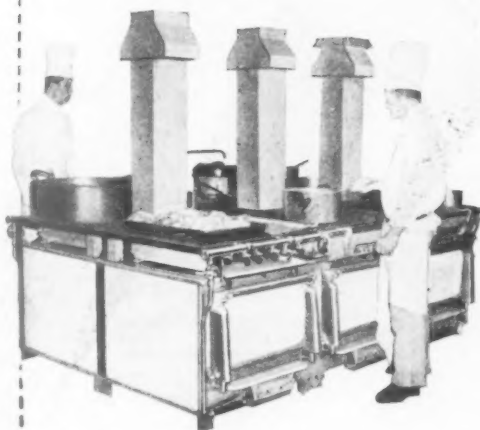


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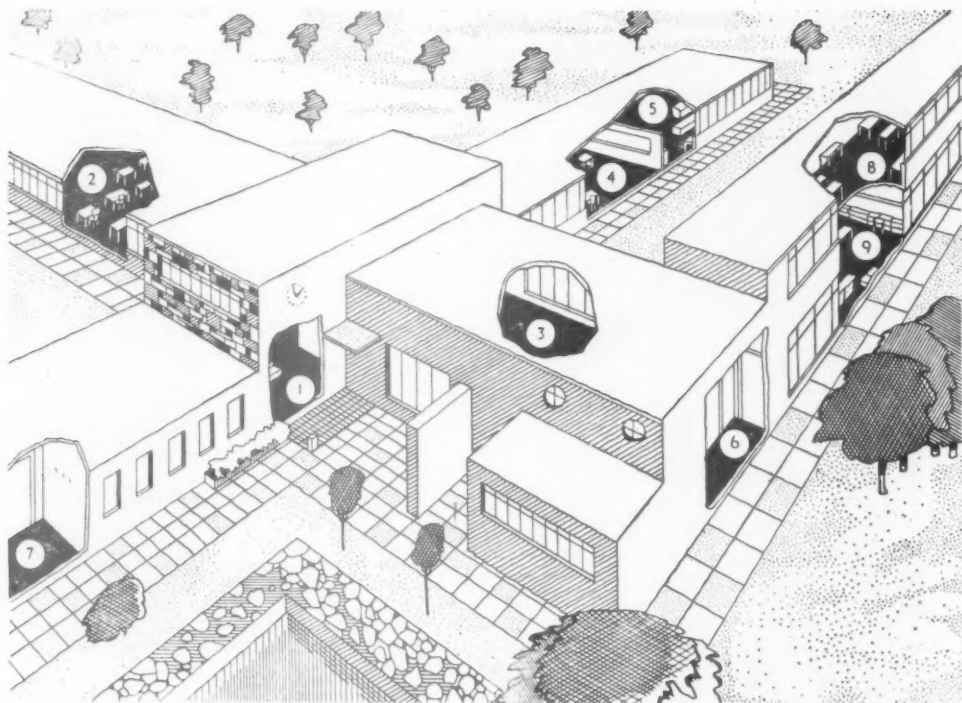
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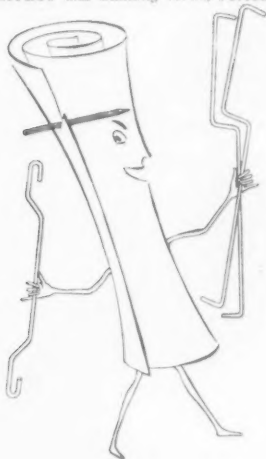
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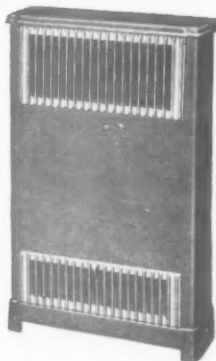


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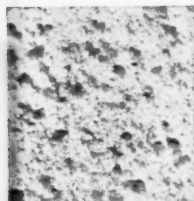
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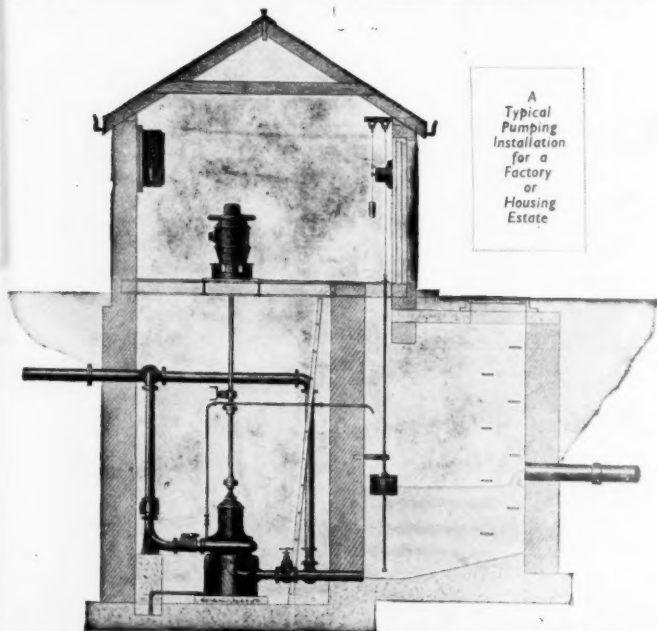
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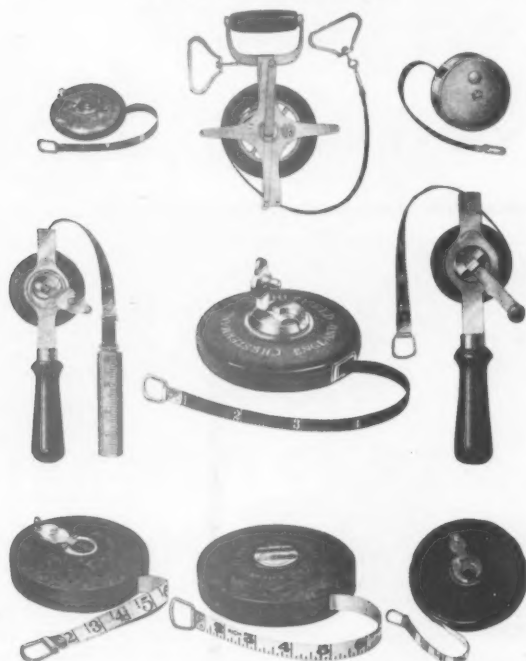
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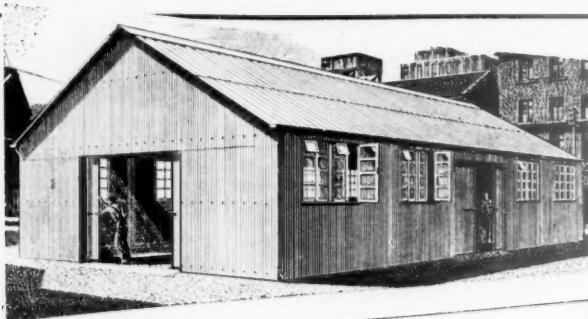


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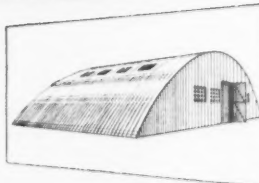
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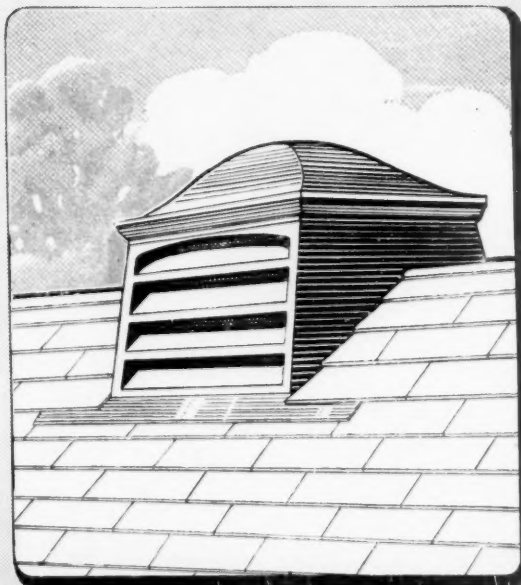
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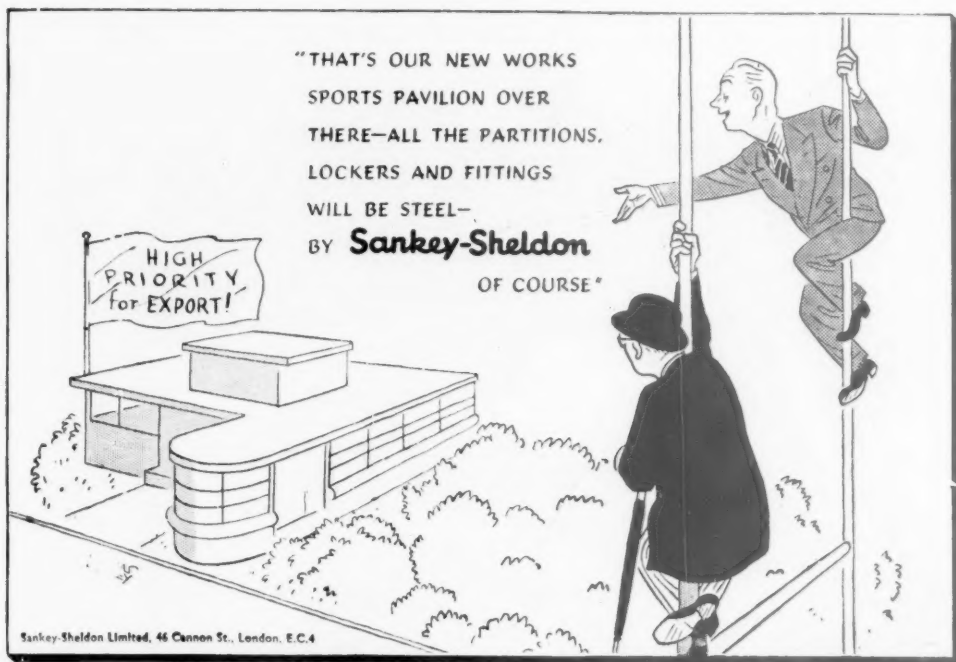


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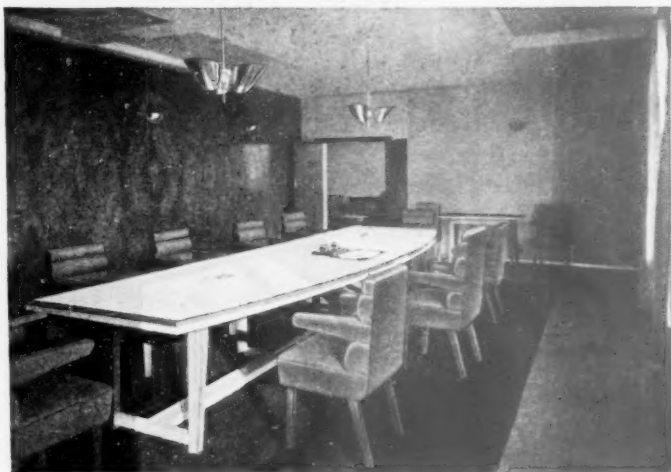
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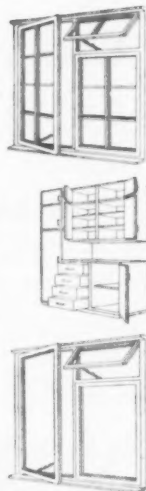
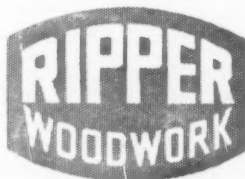
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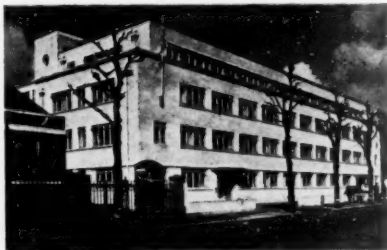
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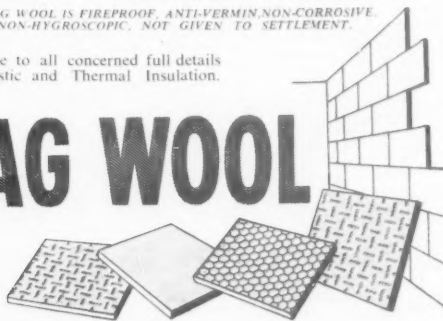
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THE
ARCHITECT
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February 2, 1951.

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AGE AND USE

THE S.P.A.B. has thought it wise and opportune to organize a short course, of a week's duration, to study the various aspects of the repair of ancient buildings.*

As a result of the war, through both direct damage and enforced neglect, there is much overdue work to be done and it is likely that the need will continue for many years to come. The S.P.A.B. realizes that younger architects can have had little or no experience of such work, and in its absence over a number of years, the older members of the profession will probably welcome a refresher course. The repair of ancient buildings requires not only some knowledge and sympathy with the design and the construction methods of the past, but an up-to-date knowledge of the latest procedure for long term, scientific, though conservative treatment of each individual case.

It is particularly important that the urgency of this sort of work and study should be impressed upon Local Authorities as well as upon private practitioners. For it is quite likely that official architects will be called upon to act in these matters; in fact, they have obligations to do so implied in the Town and Country Planning Act.

Now that new building programmes are likely to be cut or curtailed again, in the face of realizing rearmament while at the same time sustaining the housing and schools programmes, the importance of the preservation of worthy old buildings becomes even more important for the community. There are many old houses, in both urban and rural settings, too large or inconvenient for modern domestic use or for conversion into flat units; there are many old halls,

theatres and even warehouses, too small, derelict or out-of-date for present-day use, which would be given new usefulness and perhaps continued architectural life, if they could be repaired or adapted for use as institutional or communal buildings, for the benefit of local communities which may now lack this type of facilities. This is to say nothing of the mass of work needed to preserve and to restore innumerable churches, castles, bridges and other ancient monuments which form so large a part of our cultural heritage. The Society is to be congratulated for its practical initiative.

PLANNING MUST BE PAID FOR!

This week a paper was read to the Town and Country Planning Association which certainly brought planning down to the mundane terms of £ s. d. and put "paper planning" in its place. An old saying attributes the source of all evil to money, but certainly Mr. Limon, the Borough Treasurer of West Hartlepool, showed that, without much doubt, it is also the source of all planning in the solid—that the cost of the execution of a plan is a matter for serious consideration after all the technicians and the researchers have finished their analyses and assembled their syntheses on paper.

The Costs of Town Development—the title of Mr. Limon's Paper—need not be quite so frightening as some people make out. Good finance is an essential part of good planning and the budgeting of costs over whatever period is visualized, should form a part of any town and country planning report. It is the first step towards realization and upon it depends the extent of development to be undertaken within any given time.

Such an extension of a town-planning report implies also a laying-down of priorities—for the cost

*From the 30th April to the 5th of May; apply for particulars to the Secretary, Society for the Protection of Ancient Buildings, 55 Great Ormond Street, W.C.1.

cannot all be borne at once. On these points Mr. Limon suggested that there is a lamentable absence of guidance from the Ministry as to what extent it is prepared to approve development and that greater or more frequent pronouncements should be made as to the degrees of priority which it is proposed to accord to schemes during the next ten to twenty years. For instance, which comes first, "blight" or "blitz"? It is probable that all development within this current period "should be so planned that it calls for only a relatively modest rate-poundage". The lecturer suggested that this should be regarded, as a maximum addition to the rates, of one shilling in the pound, though he admitted that some authorities may be able to show a reasonable addition to or decrease of this figure.

If an "overall" plan can be fixed it enables existing premises to remain until they are ripe for demolition or reconstruction; a method that must materially affect costs in any given year. This is support for the realistic type of planning which will always bear a relation to the times in which it is done—difficult or lavish. Ideal plans may be unduly expensive; that is

not a fact which excludes them from record or from cold storage, but it does mean "cutting the cloth" to suit circumstances. In other words "planned evolution" is probably better (and even quicker in the long run) than "super-planned revolution".

As Mr. Limon said: Local Authorities will not decide to erect costly public buildings "because the situation in which they are to be built is indicated on a Plan. They will be guided, plan or no plan, by the functional necessity for those buildings". It is somewhat for this reason that the lecturer emphasised the fact that Local Authorities do not fail to obtain the money required "to finance capital expenditure" nor do they "default in payments of interest or in the repayment of principal".

Even if we agree with what G.B.S. said: "Let those who may complain that it is all on paper, remember that only on paper has humanity yet achieved glory, beauty, truth, knowledge, virtue and abiding love", we can also agree that some assistance can be rendered by a little piloting by those Borough Treasurers who have the vision and imagination to regard themselves as members of the planning team.



UNO Headquarters seen at night from Queensborough Bridge. The silhouette of UNO H.Q. is a notable contrast to those of the Empire State, Chrysler Building and other earlier skyscrapers.

EVENTS AND COMMENTS

LEICESTER SOCIETY OF ARCHITECTURAL STUDENTS

STUDENTS of the Leicester School of Architecture have formed a society, membership of which is open to all architectural students in the city. The society is not an official body of the school—although members of the staff support it. The officers of the society honoured me by asking me to speak at their first meeting, which was held last week. If all the audiences of this society are as attentive and appreciative as the one I had there should be no dearth of speakers willing to make the journey to Leicester. As at Liverpool, I was closely questioned on all manner of interesting subjects about which I know little or nothing, although I did my best to give sensible replies. There seemed to be a feeling among some of the students that there is a prejudice in London against architects trained in the provinces, and another that editors of architectural papers do not give a fair break to struggling and unknown firms. I thought that there was considerable misunderstanding on these two points and tried to explain it away. There was a very lively interest in all current problems and once again I enjoyed myself very much. Leicester is notorious for not being visited; even the books on it mention the fact that no one has ever been there, although it is only two hours from London by train. Flashing about in the Lord Mayor's magnificent car—a personal touch and nothing to do with civic receptions—I only formed a hazy idea of the lay-out of the city, but caught glimpses of the Lutyens War Memorial, which must have cost a pretty penny, a Victorian clock tower said to have been designed by Henry Goddard's grandfather, and a rather pleasant Corn Exchange, I think it was, almost completely hidden behind the temporary coverings of the largest market place I have seen in England. In my short stay I visited only two pubs, and so it is perhaps not safe to generalise, but I noticed an abnormal number of very large oil paintings in both. Perhaps at one time late in the last century there was a thriving oil painting industry in Leicester.

The idea of admitting all architectural students to the society is excellent, and might well be copied elsewhere. The unattached student or articulated pupil, and I understand that there are large numbers of the latter in the North and Midlands, has nowhere where he can meet his fellows and discuss his work and worries. The more fortunate students in schools should remember this. If they throw open their membership to outsiders they will themselves benefit from the experience of those who are out in the rough world.

Mr. Frank Chippindale, head of the School of Architecture and Building very kindly took me round the school and introduced me to several members of the staff, and that is almost all I am allowed to say, as Mr. Chippindale prefers to hide the very brightly burning light at the Leicester School of Architecture under a substantial bushel. He may very well be quite right.

On my journey home I shared a table in the dining car with an American hosiery man. We had an interesting but largely depressing conversation. He seemed to me to be a reasonably normal person, and had been a parachute major in the Pacific theatre during the war, but he staggered me by saying that when his wife says goodbye to him each morning she really hardly expects



Norwegian street decoration. See "Flowers and the Festival."

to see him return in the evening. Reason? His office is in the Empire State Building, which is considered to be a priority target for unfriendly atomic bombs. He also told me that a hall porter in New York earns more than a newly qualified architect in London. Anyone want to borrow the fare?

FESTIVAL PROSPECTS

IF the feeling of one American housewife mentioned above is general in the States, it may have serious effects on the number of American visitors to the Festival. Gerald Barry is back from America after launching a very expensive publicity campaign there which includes a four-page colour inset in *Life*. The *Daily Express* suggested that this cost £32,856 and asked readers for postcard reasons why the Festival should or should not be called off. The advertisement in *Life* includes an aerial view of the South Bank Exhibition by J. D. M. Harvey which makes it look as if there will be plenty of room for everyone and constant sunshine on the site whatever the weather is like in the rest of London. It is wretched luck for the organisers that the whole thing is overshadowed by the "march of events," but I imagine that they have little time to think of such things with only twelve weeks to go before opening day.

FLOWERS AND THE FESTIVAL

THE *Daily Express* also gave some prominence a week or so ago to the fact that the Festival authorities had asked for flowers to be supplied in bloom for

May 3. Whether or not this was an unreasonable request I do not know. Some members of the trade thought that it was impractical; all the same, they seem to manage fairly well at the Chelsea Flower Show. Apparently in spite of the mutterings someone has been found to undertake the job.

My picture shows a neat arrangement for decorating lamp posts with flowers. It comes from Halden in South Norway. I prefer it to the more usual British pattern of moss-filled wire baskets.

FESTIVAL AWARDS FOR GOOD DESIGN IN BUILDING OR LANDSCAPING

ONLY 150 entries have been received for this interesting scheme. This shows a general lack of interest by the general public in such things. The number is, however, large enough to absolve architects and others who should know better.

The Festival authorities, while not expressing themselves so strongly, evidently feel a little sad about the response and have agreed to extend the period for the submission of suggestions until March 31. I quote from the official announcement: "Any buildings, or group of buildings, or any improvement to rural or urban landscaping (excluding very large 'works' such as new towns or large development schemes, and very small 'works' such as single houses) will be eligible for the award. To be eligible, the work must have been begun since August 15, 1945, and they must be sufficiently complete to allow judgement to be made by March 31, 1951." Nomination forms may be obtained from the Liaison Branch, Festival of Britain, 2 Savoy Court, London, W.C.2.

GOING TO AUSTRALIA ?

IF you are, I advise you to find out whether your professional qualifications will allow your name to be placed on the Statutory Registers of the State in which you wish to work or will allow you to be considered for membership of the Chapters of the Royal Australian Institute of Architects. Extraordinary though it may sound, I have heard that associateship of the R.I.B.A. or a qualification obtained at one of the recognised schools is not always accepted. Perhaps the R.I.B.A. will find out what it is all about and issue a statement. Meanwhile, those interested should write to the Royal Australian Institute of Architects, Barrack House, 16 Barrack Street, Sydney, N.S.W.

THE BATH ASSEMBLY

ARCHITECTURE will be well represented in the Bath Assembly, which will be held from May 20 to June 2. The principal feature of the architectural section will be an exhibition in the Octagon Chapel which will be arranged as a "key plan" of the city to enable visitors to see and appreciate better what Bath has to offer. The exhibition will be organised by Mr. Ernest F. Tew, with the help of the Bath Group of Architects. Other architectural arrangements are the restoration of the Palladian Bridge at Prior Park, the redecoration of the Pump Room, and a lecture by Mr. John Summerson on "Bath Architecture in European Perspective."

THE BOY FROM THE BANK

THE Brixton School of Building held its annual Revue and frolic recently. The songs were, as usual, topical and witty, as the following song and patter shows. It was composed by Mike Milton, President of the Architectural Society, and my picture shows him pointing to Britannia.



*I am one of the boys from the bank—
Not Barclays or National P.—
But that nice situation by Waterloo Station
On the left coming up from the sea.*

*I am one of the few who've been chosen to do
Designs for the Great Exhibition,
And as they may appear just a little bit queer
I have come along here with a flea in my ear
To try to explain the position.*

*Each material used must be of a type
That has never before been employed,
Each architect chosen from a list of a dozen
Or the Mars group get frightfully annoyed.*

*Each building designed must be of a sort
Which has never before been erected,
It must have no visible means of support
Or the whole bloody thing is rejected.*

"I now propose to show you a few drawings of buildings and exhibits that you will see in the exhibition, but before I go any further I feel that I should give a word of explanation on this (pointing to emblem)—which you will no doubt recognise as the emblem of the Festival.

Here we see Britannia—of course, it isn't really Britannia, but a well-known female architect who at the time that she sat for this portrait was still wearing her West African make-up.

You will see that Britannia is standing on her own feet—symbolizing the happy state of co-operation existing between the Labour Government and the Federation of British Industries.

On her head she wears a helmet—of course, we all know that it's not a helmet, but a large brass coal scuttle (completely empty)—symbolizing our natural resources.

You will see that she wears nylon stockings—again symbolizing natural resources properly exploited—whereas she hides coyly behind a large star—symbolizing natural resources as yet unexploited," etc.

In spite of my New Year resolution, I was not able to attend, a pity, as I was looking forward to the mussels.

ABNER

NEWS OF THE WEEK

International Union of Architects, 1951 Congress

The Second Congress of the I.U.A. will be held at the Palais de la Mammounia, in Rabat, Morocco, from September 23-30, 1951. The theme of the Congress is "How the Architect is tackling his new Tasks." The Congress will be divided into two parts:

A. Theory and Practice of Town Planning and Architecture, subdivided into 1. Civic Centres; 2. Housing; 3. Open Spaces; 4. The Technique of Building.

B. Schedule and Future Prospects for the Reconstruction of towns destroyed and damaged, for the Redevelopment of existing towns and for the Building of New Towns.

Mr. Anthony Chitty, F.R.I.B.A., is acting as the Rapporteur for Housing (A, Section 2). The Hon. Godfrey Samuel, F.R.I.B.A., will be the second U.K. representative at the Congress.

Rome Scholarship not awarded for 1951

This year the Faculty of Architecture of the British School at Rome revised the conditions for the Rome Scholarship competition in order that no candidate might be encouraged to devote considerable time and trouble to the preparation of a final scheme before he had demonstrated, by a separate *en loge* test, his ability for imaginative planning.

The programme set for this year's *en loge* test, which was held in London and lasted 32 hours, was for a "Summer Retreat for a Foreign Ambassador in Britain," the site and requirements for which were specified in the programme. The Subject of the Programme was announced to candidates one week before the start of the test.

The Faculty have now examined the designs presented in answer to this programme by the 8 candidates previously selected for admission to the *en loge* session. The Faculty were disappointed to find very little evidence of the design quality and planning ability which they consider to be a minimum standard for this important award. The Faculty were ready, in an *en loge* test of this kind, to make allowances for shortcomings in presentation and to overlook failures to complete the required drawings in full, but great surprise was expressed that no candidate appeared to be capable of solving, in a workmanlike and imaginative manner, the far from difficult planning problem which was set.

With great reluctance the Faculty have, therefore, decided that the results do not justify their proceeding with the final stage of the competition. Accordingly the Rome Scholarship for 1951 will not be awarded.

The Tite Prize and Soane Medallion Competitions, 1951

The closing date for the submission of forms of application for the Tite Prize is March 22, 1951.

The Tite Prize, a certificate and the sum of £100, for the study of the Architecture of the Italian Renaissance, is confined to *Probationers* and *elected Students* of the R.I.B.A. and *elected Students* of Dominion Allied Societies who have passed the R.I.B.A. Intermediate or equivalent examination, or produce certificates from members of the R.I.B.A. to the effect that they have reached the required standard. Students who have passed the R.I.B.A. Final or equivalent examination or who will have passed the R.I.B.A. Final or equivalent examination at the time of the *en loge* competition are not eligible to compete.

The attention of competitors is drawn to the fact that the subject for the competition will be based upon a design in the tradition of the Italian Renaissance.

Under the new arrangements for the competition only one *en loge* competition will be held. This will take place in London and at non-Metropolitan centres on Wednesday, May 2, 1951.

The Soane Medallion and the sum of £120 is confined to members of the R.I.B.A. and of the Allied Societies overseas and *elected students* of the R.I.B.A. and of the Allied Societies overseas, who have passed the R.I.B.A. Final or equivalent examination or who have produced certificates from members of the R.I.B.A. to the effect that they have reached the required standard.

The *en loge* competition for the Soane Medallion will be held on the same day as that for the Tite Prize, i.e., Wednesday, May 2, 1951. The closing date for the submission of forms of application is March 26, 1951.

Forms of application for admission to the competitions may be obtained at the R.I.B.A., 66 Portland Place, London, W.1.

Edinburgh College of Art Andrew Grant Bequest Scholarships

The Board of Management may award twelve Junior Open Scholarships of £200 each per annum tenable for two years at the Edinburgh College of Art to students who have completed a period of, but not exceeding, two years at any recognised Art Institution and who do not exceed the age of 20 years at October 1, 1951.

The College incorporates Schools of Architecture, Design and Crafts, Drawing and Painting and Sculpture.

Application forms and further particulars may be obtained from the Secretary, Edinburgh College of Art, Lauriston Place, Edinburgh, 3.

The latest date for receiving applications is February 28.

I.A.A.S. Forthcoming Exams

The Incorporated Association of Architects and Surveyors will hold examinations in the following sections during the week commencing May 28, 1951:

Architectural (Intermediate and Final); Quantity Surveying (Inter-

mediate and Final); Building Surveying Municipal (Intermediate and Final); Building Surveying—Non-Municipal (Intermediate and Final); Fire Surveying (Direct Associateship).

The normal centres for examinations are London, Birmingham, Bristol, Cardiff, Edinburgh, Glasgow, Liverpool, Norwich, Nottingham, Southampton and York.

The closing date for receipt of candidates' applications for permission to sit (which must be made on the prescribed form) will be Monday, April 2, 1951.

Copies of syllabuses, application forms and other information are obtainable from the Assistant Secretary, I.A.A.S., 75 Eaton Place, London, S.W.1.

ANNOUNCEMENTS

Messrs. Fry, Drew & Partners wish to announce that Mr. Maxwell Fry and Miss Jane Drew have, with M. Pierre Jeanneret, been appointed Joint Architects for the building of the new capital City of the Punjab for the Government of the Punjab, India. M. le Corbusier is appointed consultant to the Punjab Government for this scheme.

Mr. Maxwell Fry is leaving for India at once and Miss Jane Drew will remain in the United Kingdom for the present to deal with outstanding work of the practice in England and West Africa.

At a date later to be announced, the firms of Messrs. Drake & Lasdun, of 29 Sackville Street, W.1, and Messrs. Fry, Drew & Partners will be joined under the title of Fry, Drew, Drake, Lasdun & Partners to carry out the joint practices from 63 Gloucester Place, London, W.1.

On Mr. Peter Caspari's departure to Canada, Mr. H. S. Jaretzki has agreed to take over the goodwill of his practice and his work in hand under the firm to be known as "H. S. Jaretzki & Peter Caspari," which will operate from 20 Dorset Square, London, N.W.1. Telephone Ambassador 2833.

OBITUARY

The death occurred on January 17, of Francis Hayward Floyd, F.R.I.B.A., of Newbury, aged 76.

COMING EVENTS

R.I.C.S.

● February 5, at 5.30 p.m. "Leasehold Reform." Speaker: Michael E. Rowe.

R.I.B.A.

● February 6, at 6 p.m. President's Address to Students. Criticism by R. E. Enthoven. Presentation of Prizes.

Institution of Structural Engineers

● February 8, at 5.30 p.m. "The Construction of an Extension to a Factory at Silvertown." Speaker: F. G. Etches.

University of London

● February 8, at 5.30 p.m. "Thoughts on Architecture To-day." Speaker: Michael Waterhouse.

Ecclesiological Society

● February 10, at 3 p.m. "Stained Glass." Speaker: Carl Edwards.

IN PARLIAMENT

Valuation Date Postponed

Mr. Bevins asked the Minister of Health if he would make a statement on the postponement of the date for the new valuation lists for rating purposes from April 1, 1952, to April 1, 1953. Mr. Dalton stated that he was satisfied, after consulting the Board of Inland Revenue, that the volume of work involved made it necessary to defer the date to 1953, and he had informed the local authority associations accordingly. The necessary Order would be made in due course. (Jan. 25.)

Festival Loans

Mr. Redmayne, who sits for the Rushcliffe division of Notts, asked the Minister of Health whether requests by local authorities for loans or for authorisation of capital works related to the Festival of Britain were required to be clearly stated for that purpose. (Jan. 25.) Mr. Dalton informed him that this was not so. Local authorities had no power to carry out works or borrow money for Festival of Britain purposes; they must rely on their ordinary statutory powers for authority to borrow for works they proposed to undertake in connection with the Festival. The fact that they had the Festival in mind would not necessarily appear in their application for loan sanction.

Private Enterprise House

Mr. Marples asked the Lord President of the Council whether he would arrange for the erection in the Festival of Britain grounds of a private enterprise house built to the standards of the National House-builders' Registration Council. Mr. Herbert Morrison said that he assumed the question referred to the South Bank Exhibition. He was not quite sure what Mr. Marples had in mind, but in any case it would be quite impracticable to make any substantial alteration in the Exhibition at this late stage. (Jan. 29.)

Curb on Points

Mr. G. P. Stevens asked the Minister of Health (Jan. 25) whether, in view of the shortage forecast in electricity supplies he had given any directive to local authorities to reduce the number of electrical fittings in council houses. Mr. Dalton said that his predecessor (Mr. Bevan) had already advised local authorities to economise in fittings. Then Mr. Stevens, who represents the Langstone division of Portsmouth, stated that a local council had received within the past fortnight a letter from the principal regional officer of the Ministry saying that they were unaware of any proposed restriction on such installations. To which Mr. Dalton said that if the letter was sent to him he would look into it.

New Foreign Office Building

Mr. Keeling asked the Minister of Works (Jan. 23) whether he knew that the plans of the proposed new Foreign Office buildings substituted two pedimented features for one in the facade overlooking the Mall, and therefore did not bear out his assurance that Nash's facade was preserved. Mr. Stokes' reply was that the architect's drawings

showed the Nash pediments removed, but he proposed to follow the advice of the Royal Fine Art Commission and leave the pediments in place until the new building had been completed. It would then be decided whether they ought to be retained. He was aware that the Crown Lands Advisory Committee said that the height of the buildings in Carlton House Terrace ought not to be extended. They had, however, consulted the Royal Fine Art Commission, who approved the architect's plans proposing a small increase in height, subject to further consideration of the pediments.

LAW REPORT

At the Old Bailey last week, Mr. Raglan Squire, F.R.I.B.A., of Eaton Square and Messrs. Wates South-Western Estates Ltd., of Norbury, were found *not guilty* of unlawfully carrying out building work without a licence granted by the Ministry of Works and failing to comply with a condition of a licence granted by the Ministry of Works. They were discharged.

Mr. Richard F. Levy, K.C.; Mr. Gerald Howard, K.C., M.P.; Mr. Christmas Humphreys; Mr. Derek Walker-Smith, M.P., and Mr. Rider Richardson, appeared for the defendants, whose costs are estimated at £10,000.

Mr. Griffith Jones, prosecuting, said that early in 1947 the Nuffield Trust decided to convert a former restaurant in Adelaide Street, Strand, into their Services Club as the lease of their premises in Wardour Street was due to expire.

The Trust's architects, Messrs. Arcon, of which Squire was a partner, were engaged to supervise the work which was commenced by Wates Estates in October.

The two licences which were issued were for a total of £24,000 and the Centre opened in July, 1948. The final account came to £54,184, including the non-licensable work. According to the prosecution, the total licensable work done amounted to £50,608, representing an unlawful excess of £26,000. The Nuffield Trust reported it to the Ministry.

Squire made a statement that the final costs were quite unexpected. The semi-official standing of the Nuffield Trust had led them to believe the final figures would be endorsed by the Ministry of Works, and the position legalised. He had advised the Nuffield Trust to apply for endorsement, but they declined to do so.

"Indeed," said Mr. Griffith Jones, "if a third licence had been applied for, there is very little doubt that it would have been granted because the Nuffield Trust had the backing of all the Services departments."

"None of the work done was outside the original specification approved by the Ministry of Works. Only the costs were exceeded."

Mr. H. A. Giddings, Ministry of Works architect, gave evidence of the amounts of licensable and non-licensable work done.

The following day, Mr. Giddings returned to the witness box and said: "I have my figures the wrong way

round." He finally put the non-licensable work done "at a minimum £3,000, at a maximum £5,000."

Cross-examined by Mr. Howard, the Ministry witness said his figures were "a guess, but I hope a fair one."

Mr. Howard commented on Mr. Giddings' evidence: "If it were not for the possible tragic results of this prosecution for Mr. Squire, the evidence of Mr. Giddings, the Ministry of Works expert, might be comic."

Mr. R. E. Seaton, who also prosecuted, told the jury: "No doubt you will be pleased to acquit Mr. Squire. Everybody would be pleased to acquit him. If there ever was a case in which you could sympathise with the defendants, this may be it."

"No one here has alleged any dishonesty. I agree it is a little incongruous to find a man of such personality, skill, ability and honour, and at the height of his professional life, sitting in the dock like a criminal. You may well think that it would be more appropriate if he was sitting in front of the dock with his legal advisers."

After Mr. Seaton's speech, Mr. Richard Levy, K.C., addressing the jury, commented: "This is a very odd prosecution indeed. You have just had the unusual experience of hearing the prosecution say everybody would like to see the defendants acquitted, but suggesting to you nevertheless that you should convict them."

"That seems a bit like Alice-in-Wonderland; like the Mad Hatter's tea-party."

Squire, in evidence, said he at any time believed a third supplementary licence was necessary, he would have applied. It was not until the Centre had been opened that the final accounts were received from sub-contractors and showed unexpected increases.

The estimate was exceeded because of inaccurate forecasting by sub-contractors; the additional amount of detailed work necessary after fresh and continually changing instructions from various representatives of the Trust, given on the site direct to sub-contractors; considerable overtime paid to finish re-conversion by the date continually urged by the Trust; and the amount of idle time necessitated to avoid losing workmen at a time when it would have taken too long to replace them.

Squire said the amount of licensable work done was £38,600; unlicensable £15,576.

Mr. Richard Levy, K.C., for Wates Estates Ltd., said the company and its subsidiaries were one of the largest building firms in the country, and had the highest reputation. They relied on the architects to keep the licence position regulated.

At no time did the company knowingly contravene the regulations and they always accepted the estimate of the architects that a third of the work was unlicensable.

Mr. Archibald G. Jury, F.R.I.B.A., the present director of housing for Glasgow, has been unanimously recommended by the General Finance Committee of Glasgow Corporation for the post of city architect and planning officer. The salary for the post is £2,000, rising to £2,500.



SWINTON FITZWILLIAM INFANTS' SCHOOL

Architects: SHAPLEY & DAVISON, A./F.R.I.B.A.

in collaboration with HUBERT BENNETT, F.R.I.B.A.,
West Riding County Architect

Assistant Architect: W. H. CLEGG, A.R.I.B.A.

THIS two-form entry Primary School, to provide accommodation for 240 infants, comprises six Classrooms of 600 feet super each, Assembly Hall of 2,000 feet super—also to be used for dining purposes, with Kitchens to serve 200 diners.

The building is being carried out under two contracts. The foundation contract includes general levelling and construction of reinforced concrete raft foundations up to the top of the concrete sub-floor. This work is in the course of construction. The superstructure contract is to be proceeded with on completion of the raft foundations early this year.

Site

The site covers an area of 4.75 acres, and falls steeply from west to east. A roadway along the S.E. and S.W. boundaries provides access from the rapidly developing housing schemes completely surrounding the site.

The site is in a mining area, where subsidence is to take place within the next few years.

There is almost a complete absence of top soil, and apart from a 6 in. covering of turf, the sub-soil is composed entirely of a bed of sand approximately 6 ft. deep on a strata of bedded sandstone.

Lay-out and Landscape

The placing of the School in the east corner of the

site was mainly influenced by the necessity to allow for a future Junior School.

Two tarmacadam play courts and a terrace for open air teaching are the main requirements outside the building. A small car park for two or three cars at the main entrance, an enclosed service yard and a children's play corner are also provided.

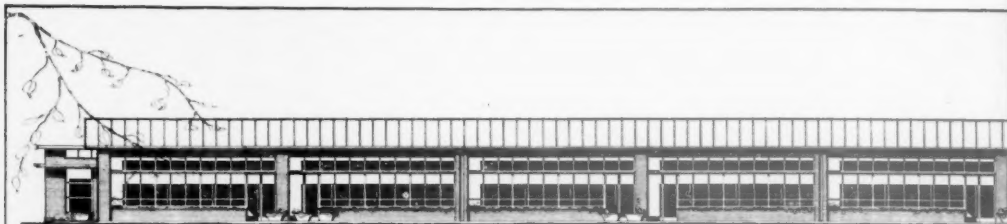
Standard flowering trees are to be planted along the south-east frontage, forming a screen to the roadway and houses opposite and overlooked from the Classroom windows. Larger trees between the car park and service road are to screen the housing scheme adjacent to the N.E. boundary.

For the remainder of the site, an informal planting scheme was decided upon with carefully selected trees planted singly or in groups of a variety to suit the sandy sub-soil.

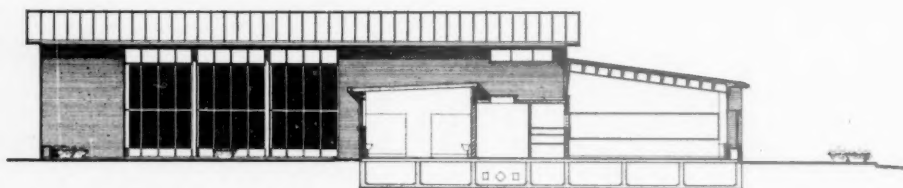
The children's play corner has been designed to simulate a natural outcrop, by forming banks and excavations of irregular shapes, with groups of large stones taken from the Boiler House excavations and planted with hardy shrubs as a dominating feature. Provision is also made for a future sand pit.

Flower tubs, arranged in groups, are to be placed along the edge of the terrace to the Classroom wing, and between the terrace and the roadway a lawn is to be formed.

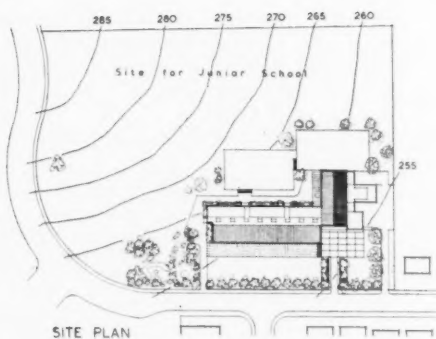
(Continued on page 140)



SOUTH EAST ELEVATION



SECTION THROUGH CLASSROOM BLOCK



SITE PLAN

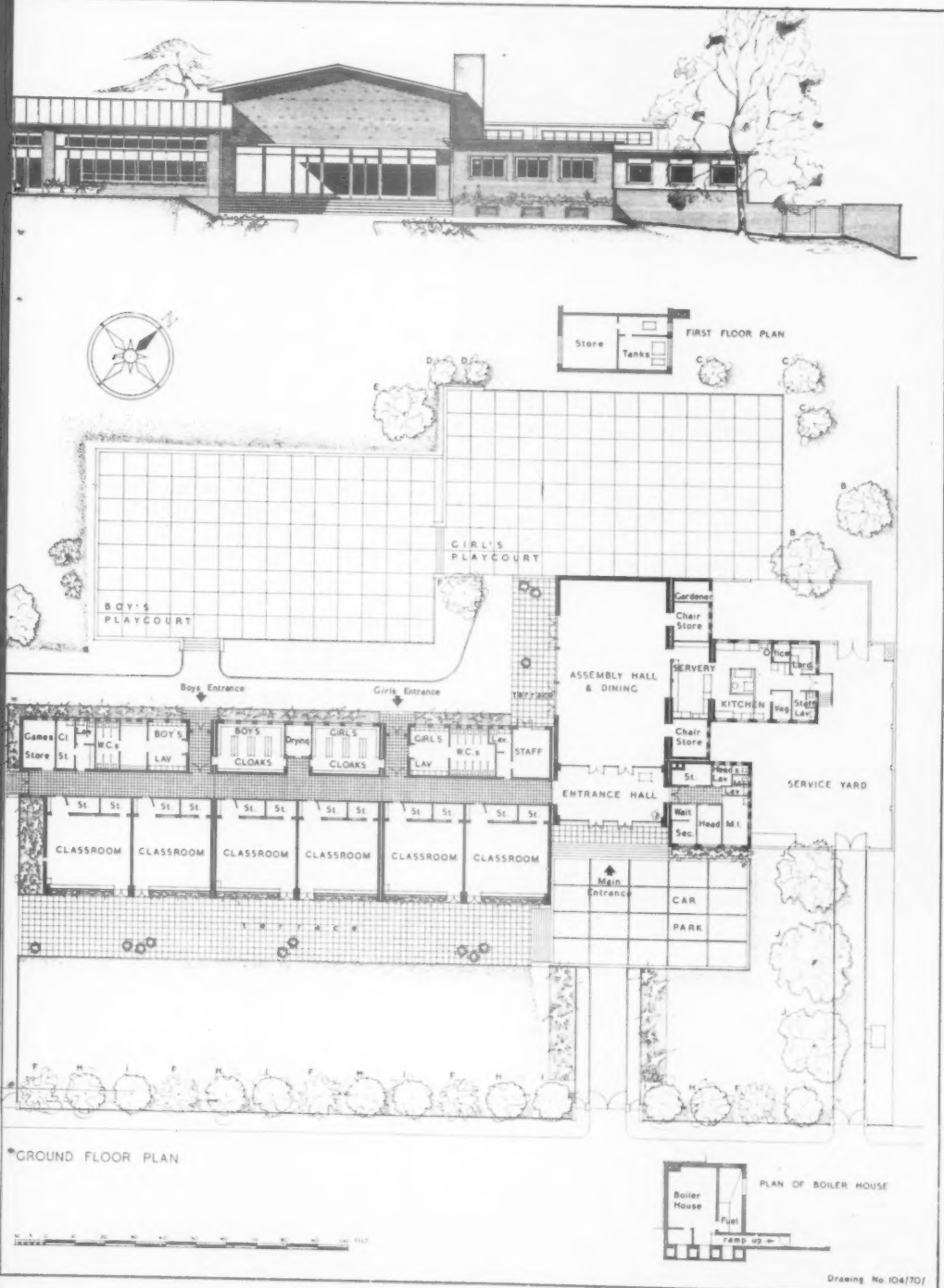
Shapley & Davison FJARIBA
Chartered Architects
3 Kingston Terrace
Woodhouse Lane Leeds 2
in collaboration with
HUBERT BENNETT FRIBA
West Riding County Architect
August 1950

KEY TO TREES

- A Holly
- B Black Cottonwood
- C Austrian Pine
- D Corsican Pine
- E Oak Sessile
- F Cherry
- G Laburnum
- H Plum
- I Mountain Ash
- J Acacia var. Fastigiata
- K Birch Pubescens
- L Birch Verrucosa
- M Birch Pendula



SWINTON FITZWILLIAM INFANTS SCHOOL



Plan

The plan for the School on this site was mainly influenced by the following factors:

1. To allow the maximum area of the site for the future Junior School, which dictated that the School should be as compact as possible.

2. That advantage be taken of the widest contours, and so avoid the necessity for steps or ramps within the building.

3. That the building be so planned as to be easily divided into small compact units for the purpose of constructing the reinforced concrete rafts.

Construction

Load-bearing brick walls were decided upon, to afford rapid erection and economise in the use of steel. Externally, walls are 11 in. cavity, except for the Assembly Hall which are increased to 16 in. cavity.

The flat roofs are to be of concrete, with a vermiculite screed covered with built-up three layer roofing felt.

The single pitch roof to the Classroom block is also of concrete, and the Assembly Hall consists of light steel trusses and channel reinforced wood wool slabs. Both these roofs are to be covered with light gauge copper sheeting.

The windows are of metal, fixed in metal sub-frames.

A canopy of light steel, with asbestos and wood wool infilling supported on tubular columns, is provided along the entire length of the Classroom wing to adjust the daylighting.

All double doors to the corridors will be of hardwood with glazed panels. Other internal doors to be

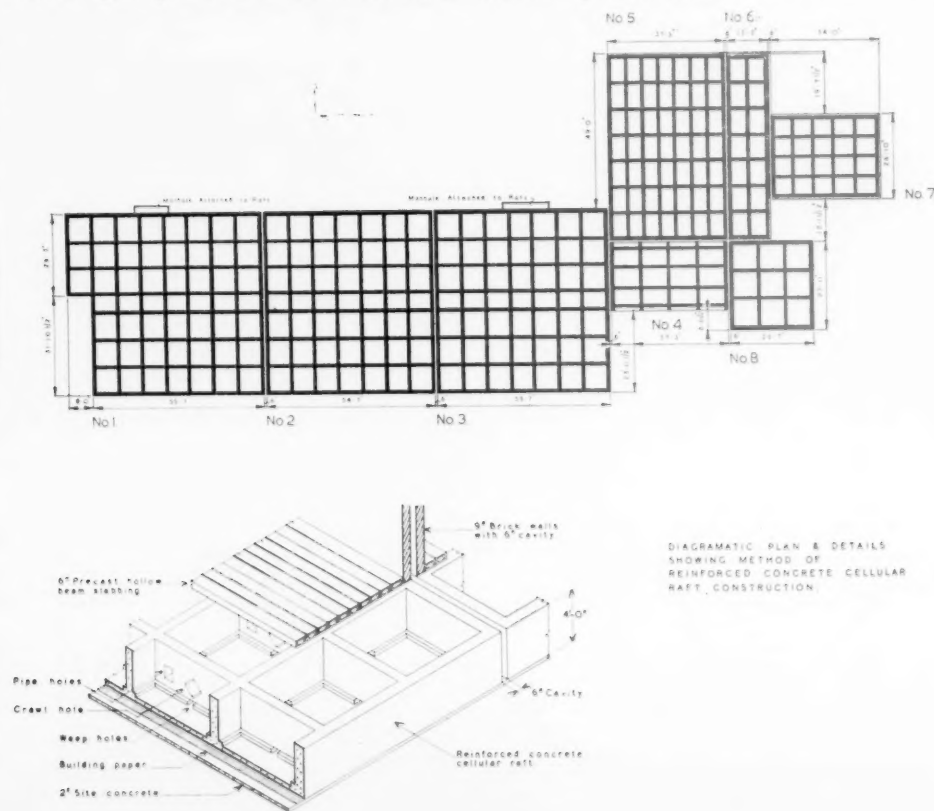
generally light weight flush doors, easy to operate by infants.

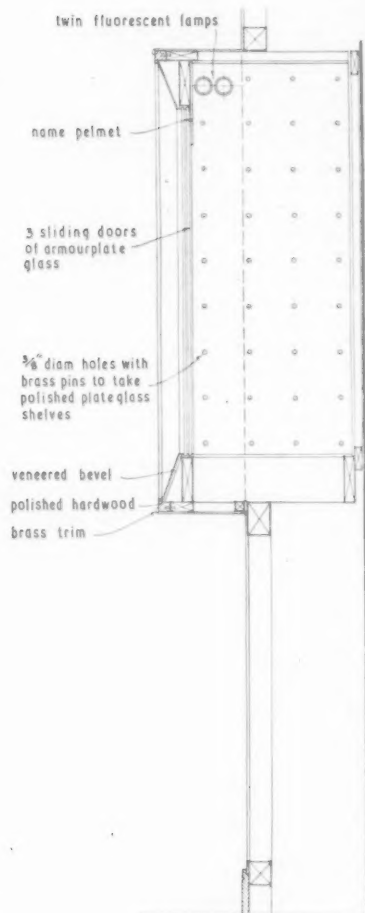
Internal Finishes

Classrooms: Asphalt tile flooring with cove tile skirting. Walls plastered and distempered above a painted dado. Ceilings, fibre board and distempered. Corridors: Asphalt tile flooring with cove skirting. Flat pointed brick walls painted. Ceiling, plastered and distempered. Main Entrance Hall and Assembly Hall: Floor, wood block hardwood skirting. Walls plastered and painted above painted dado. Ceiling, fibre board and distempered. Staff Rooms: Wood block flooring, wood skirting. Walls and ceilings plastered and distempered. Toilets: Asphalt tile flooring, cove skirting. Walls plastered and painted. Ceiling, plastered and distempered. Kitchen and Servery: Quarry tile floor, cove skirting. Walls and ceilings plastered and painted. Glazed tiling to sink and drainers. Cloakrooms, Lavatories, Stores: Granolithic flooring, cove skirtings. Walls, flat pointed brickwork and painted. Ceilings, plastered and distempered. W.C. compartments will be metal faced plywood. Cloakroom fittings to be tubular steel with hat and coat hooks. Hardwood seats with shoe rack under.

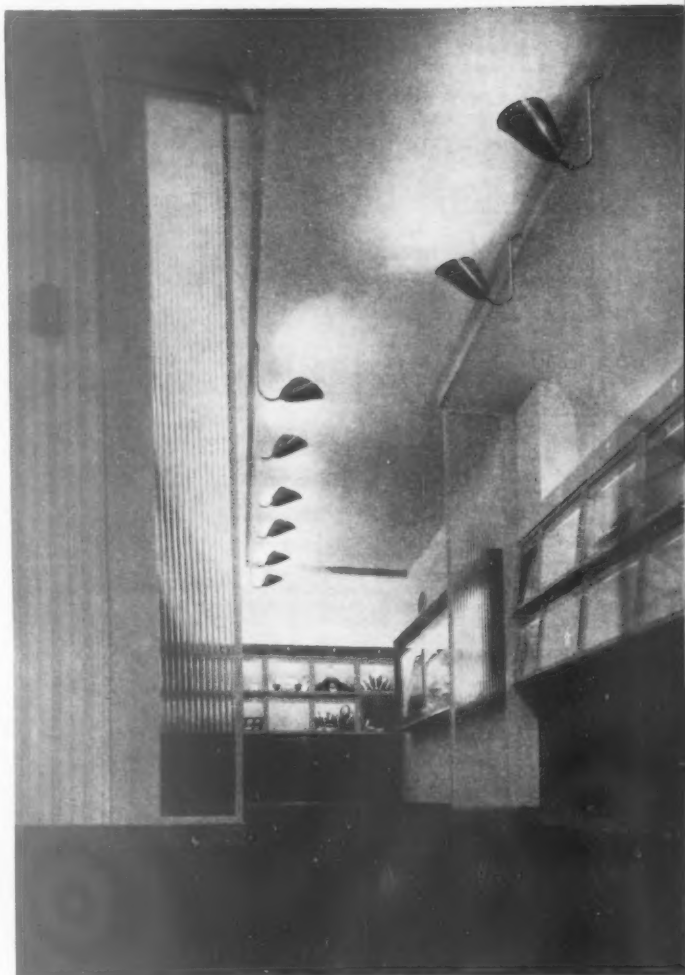
Services

Heating by low-pressure water radiators, supplied by a coal fired boiler with a hand fed automatic stoker. A calorifier to provide hot water in winter, and in summer this would be supplied by a thermostatically controlled gas-fired boiler.





SECTION B.

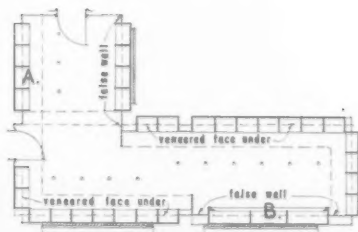


The ceiling of the showroom is lemon yellow; the wallpaper is lemon and white stripes; the carpet is deep red. The section on the left is through the silver showcase.

B. J. A. EXPORT SHOWROOM

19-25 Gutter Lane, E.C.2.

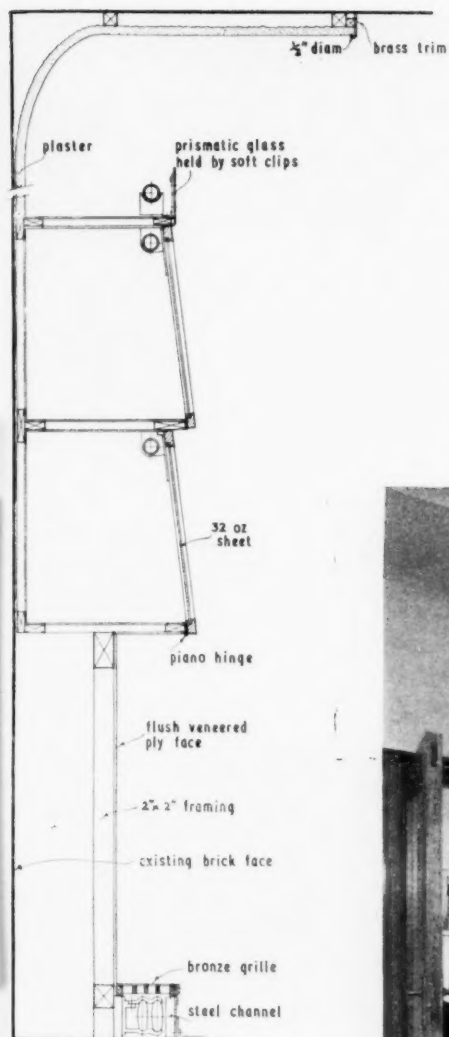
designed by
HULME CHADWICK, A.R.C.A.



KEY PLAN.

1 0 12 24 inches.

THE function of this showroom was to provide temporary showrooms for the British Jewellers' Association to exhibit the products of their members to the export buyer. The building was a single-storey, temporary brick and concrete structure situated on a bombed site near St. Paul's. Owing to the main showroom being long and narrow, indirect lighting was introduced above the showcases and the ceiling coved where this occurred, thus giving a more spacious effect. The ceiling shapes and heights were purposely made irregular in



SECTION A.

B.J.A. SHOWROOM
designed by
HULME CHADWICK

order, again, to give a greater feeling of space. The small individual showcases are lit by a continuous run of fluorescent tubes. The set back face of veneered ply beneath containing a cavity behind to house the starting gear for these lamps. The small platform beneath these showcases contains low temperature electrical tubes, the air entering through the holes in the Waverite riser face and passing out through the metal grille forming the top of the platform. The large silver showcase is divided into three sections, divisions and end of showcase being drilled with holes at regular centres, the holes being lined with metal sleeves in which pegs are inserted to support glass shelves at any position. The decorative light fittings were all in spun brass and the radiator grille beneath the window in the small showroom was of satin aluminium and polished brass. Veneers throughout were sapele mahogany, frames of the small showcases in bleached beech. An attempt was also made to increase the apparent size of the small entrance lobby by having one wall of matt painted brickwork and the opposite wall in high gloss paint for reflection.



CORRESPONDENCE

Electrical Floor Heating

To the Editor of A. & B.N.
 Sir,—I am surprised to see "Abner's" reference to Electrical Floor Heating in his comments in last week's issue, with implied hopeful anticipation of progress along these lines.

Please couple it with the penultimate paragraph of your leading article, in which you state "it is no good trying to plan inside water-tight compartments. Once more we would plead for more co-ordination between the requirements of different Departments and for more knowledge of the relationships between the main factors of planning."

"Town and Country Planning cannot benefit the community fully if opposition of conflicting factors is allowed to continue; half the problem is to recognise a conflict when it exists, but even that is not aim, it seems, in some quarters."

May I state categorically that the Architects, Town Planners and Electrical Authorities between them bear a very heavy proportion of the responsibility for the fuel crisis, one by their exaggerated ideas of open layouts and lighting requirements, and the other by incessantly pushing and subsidising the most costly form of space and water heating.

The thermal efficiency of Electric Generating Stations, at the Stations, for generating only is 21.33%, but allowing for mains losses in distribution, it is at most 18.2%.

The net result is that electric heating requires approximately 50 lb. of coal to supply one therm to a building for space heating, and it matters not whether the heat is under floor, off peak, or any other method, 50 lb. of coal is still required.

The average modern open fires could do the same work with 36 lb. of coal; gas fire with about 30 lb. and central heating with, at the most, 17 lb. and possibly as low as 15 lb. of coal. If we adopt a method requiring twice or three times the fuel, where is it to come from and who is to go short?

Surely Architects and Planners should

appreciate these facts. All by now surely know that shortage of fuel is likely to be disastrous to our standard of living, and it is criminal waste therefore to plan town extensions and design buildings without full consideration of their thermal requirements.

I estimate that the fuel wasted on space heating to-day by electricity is at least between 5 to 6 million tons per year.

The capital cost involved is also serious. It seems easy and cheap to the Architect to cut out his boiler house and put in an electric point, but when we reckon that the capital value at the power stations is £50 to £60 per KW. and the total of plant serving space heating load is nearly £100 million, and that this serves only about 5 per cent. of our total heat requirements at a cost of nearly 20 per cent. of the total annual cost of heat, it is high time that all concerned probe a little into the economic issues of fuel and power as applied to buildings of all types.

Without heat and power in this climate, we perish. Surely two fuel crises within four years are enough to emphasize the dangers.

I have seen plan after plan for reconstruction of existing towns, new towns, and for housing, with little thought of fuel problems, and even when they have been considered, plan after plan has been wrecked by wrong policies, change of policies, or timid approach to this issue.

I am, etc.,

DONALD V. H. SMITH.

To the Editor of A. & B.N.

Sir,—I wish I always knew when "Abner's" tongue is in his cheek—as, for instance, when, in the issue of January 26, he talks of "the possibilities of heating solid floors by electricity."

If he is serious, he ought to know that this kind of heating—by low-temperature resistance cables incorporated in the floor—is already a *fait accompli*. Even here, in circumspect and canny Dundee, I can think of three such installations offhand. One of them is in my own house, built over a year ago, and a very comfortable notion it is, too.

If I see black margins around his

page one of these days, I'll understand that someone has broken to "Abner" the sad news of the passing of her lamented Majesty Queen Anne. If, on the other hand, "it was a yoke," I wish it had been printed in italics for the benefit of us proverbially literal-minded Scots!

I am, etc.,

W. SINCLAIR GAULDIE.

• • •

Bath Assembly

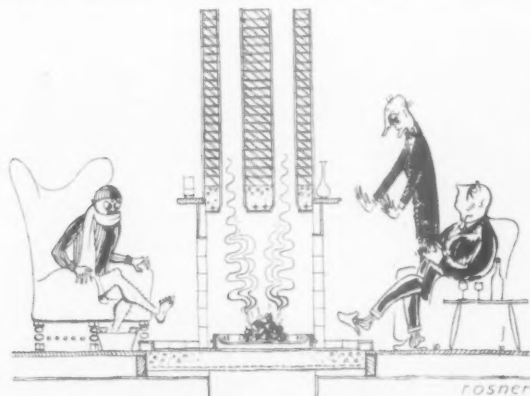
ONE of the problems that has hitherto confronted the Bath Assembly has been that the city's greatest attraction has been itself, and that Bath's architecture can be seen and appreciated, not only during the Assembly, but all the year round. The newly constituted Management Council of the Assembly are planning in future to circumvent this problem in a novel and well inspired way, beginning with 1951 when the Bath Assembly is to be one of the provincial components of the Festival of Britain. For they have made plans whereby musical events will be combined with the exploitation of some of Bath's famous architecture in a manner that can only be done on some such special occasion as the Assembly. For there are to be two important musical events—a serenade concert and a recital by the City of Bath Bach Choir—in the specially lit setting of the Roman Baths, and the Pulteney Bridge, also floodlit, is to be the background for a performance of Handel's Water Music by players in costume on a raft decorated in 18th century manner.

Architecture is to be brought even more specifically into the picture for the first time this year, a wise and timely decision for a Festival of the Arts held in a city where architectural achievement is surely among the most important artistic features. The famous Octagon in Milsom Street, now being redecorated for use as an Arts Centre, is to be finished in time for it to be the scene, during the 1951 Assembly, of an exhibition of West Country Architecture, this being in fulfilment of the important policy decision that the West Country contribution to culture is to be a leading motif of the Bath Assembly. There are also plans for lectures on various aspects of art, including architecture.

The visual arts are very well represented on the new Management Council. Two members are Bath architects—Mr. Hugh Roberts, F.R.I.B.A., and Mr. E. F. Tew, A.R.I.B.A., while others are Mr. Clifford Ellis, of the City of Bath Art School, Mr. Bryan Little, the author of "The Building of Bath," Mr. Oliver Messel, and Lord Methuen.

The Assembly is to last from May 20 to June 2, and details can be had from the Hon. Administrative Director, Pump Room, Bath.

It is also good to hear that the Pittville Pump Room at Cheltenham will have been restored and redecorated in time for the 1951 Music Festival in July, when it will be used for a very well planned exhibition of Cotswold crafts, including work by William Morris and E. W. Gimson.



"The B.R.S. say it cuts fuel consumption by 50%."

Mortuary and Post Mortem Department at Warwick Hospital for the Birmingham Regional Hospital Board

Architects:

PHILIP SKELCHER & PARTNERS, L.A.R.I.B.A.

in collaboration with

DONALD A. GOLDFINCH, F.R.I.B.A.

Architect to the Birmingham Regional Hospital Board.

THE plan provides for a Viewing Room, Post Mortem Room, an entrance porch to the Viewing Room, Refrigerator, Motor Room in connection with the latter, Pathologist's entrance and Cloakroom, and Sterilizer Room.

Materials and Furnishings

The entrance porch, Sterilizing Room and Viewing Room have been paved with heather coloured quarries, and have Prodorglaze walls and Prodorglaze on a false fibreboard ceiling.

The Post Mortem Department, including entrance porch and cloakroom, has terrazzo floor into which are built drainage channels, glazed tiled walls, and Prodorglaze fibreboard ceiling.

All windows are standard galvanized steel casements. Heating is by low-pressure hot water from mains which were already available. Hot and cold water are drawn from existing mains, and drainage is connected to existing drains. It will be observed, however, that inside the Post Mortem

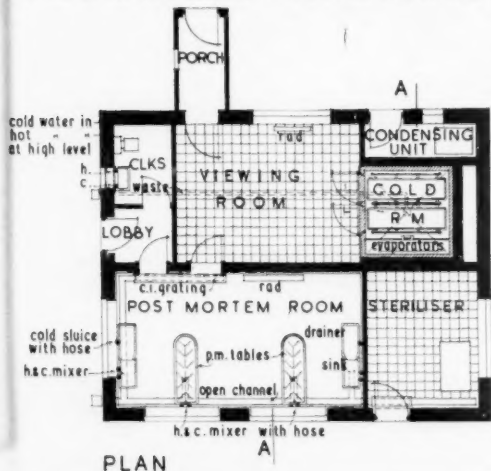


Post Mortem Room

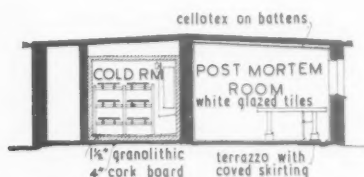
Room drainage is by open channels, and the main outlet is through a flap valve into a large gully just outside the building.

Method of Operation and Furnishing

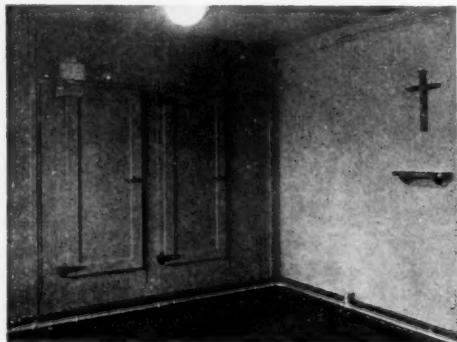
The Sterilizing Room is for general use in connection with all Hospital Departments, and need not necessarily have been attached to the Post Mortem Department. Accommodation was, however, required, and could be provided here more conveniently than anywhere else. The main uses of the Unit are: (1) Viewing, for identification purposes, etc.; (2) Mortuary storage; (3) Autopsy. The building and the



PLAN



SECTION A-A



Viewing Room

refrigerator are normally all kept locked up, and are only used on certain occasions.

If a patient in the Hospital dies, or if a person dies outside the Hospital and it is necessary to conduct a post mortem examination, the body is brought to the mortuary and put in the refrigerator storage. The refrigerator is provided with frame and sliding body racks, and is of sufficient size to accommodate six bodies.

For identification purposes, or for relatives to view, a draped bier is provided, and the body is placed thereon. The end wall in which the refrigerator is situated is entirely covered by a curtain, and the Viewing Room is prepared and furnished to suit the occasion.

The Post Mortem Department has a separate approach, and is designed to allow for easy and complete cleanliness, good light, and above all (very necessary) adequate warmth. It should be noted that the standard height of the post mortem slabs is about 6 in. or 8 in. lower than it is convenient to work on, and arrangements were made for them to be raised so that the tops of the slabs are now just over 3 ft. high.



Perspective view of the Station Street Frontage, 420 ft. long.

New Printing Works, Nottingham for Messrs. Boots Pure Drug Co. Ltd.

Architect: P. J. BARTLETT, F.R.I.B.A.

formerly Chief Architect, Boots Pure Drug Co. Ltd.

Chief Assistant in charge of works: A. J. R. MARSHALL, A.R.I.B.A.

WORK has been proceeding since 1947 on the rebuilding of the Printing Works of Messrs. Boots, the Manufacturing and Retail Chemists at Nottingham. This new building is to replace the extensive Printing Works, which was almost completely destroyed by enemy action.

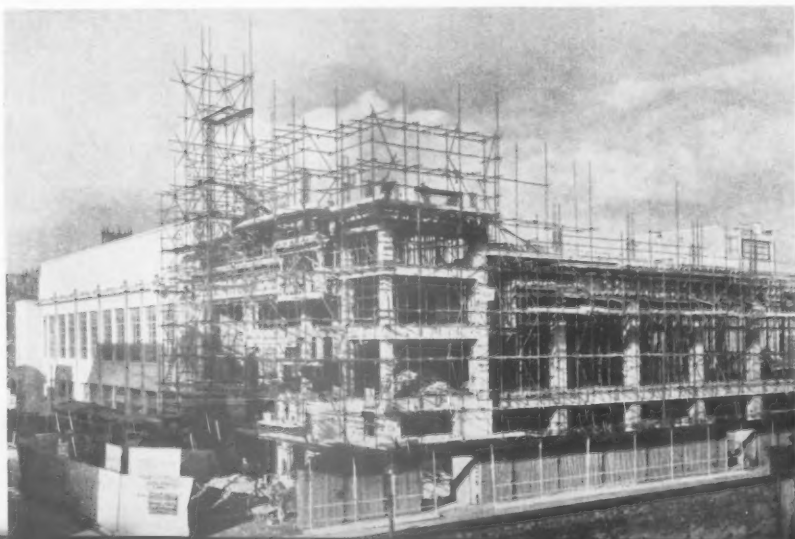
It may not at first be realised that a manufacturing and retail chemists business requires an enormous amount of printed matter. The works have been designed to deal with the large quantities of labels, cartons, boxes, packaging, bookbinding, office and shop stationery and general printing required by the firm in connection with the home and export trade.*

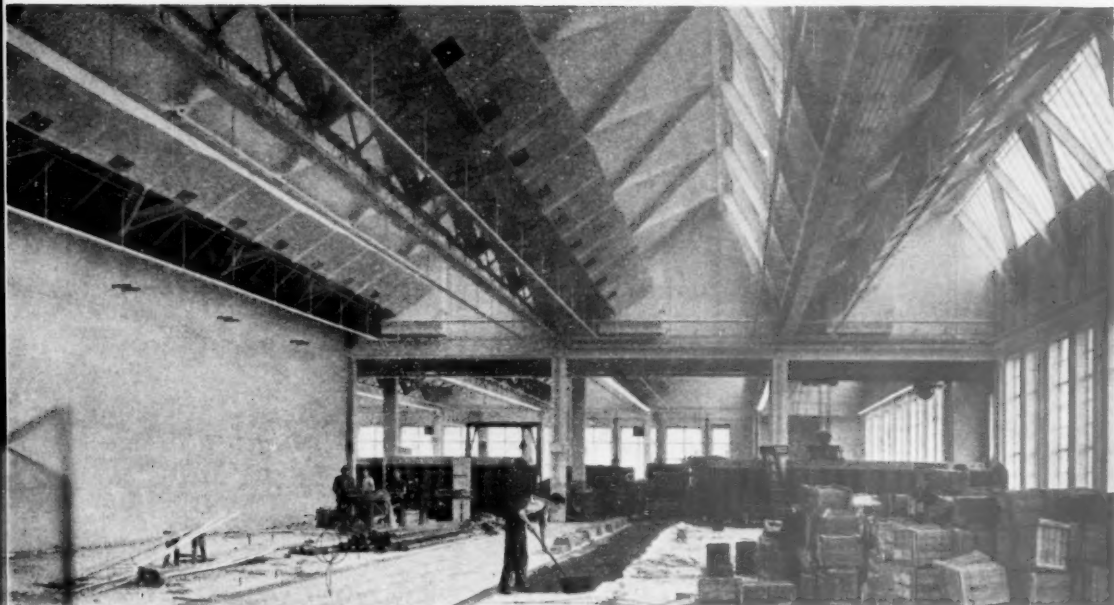
A staff of 1,000 printers and ancillary tradesmen (male and female) will eventually be employed in the new building.

It was necessary to construct the building in three stages due to site difficulties and the first stage has been completed and in use for some time. Work is now proceeding on the second and final third stage and when complete the block will have two production floors of approximately 101,000 square feet, with a second floor along Station Street of about 32,000 square feet.

Stores will be brought in via the N.W. Loading Dock and after printing and preparation the finished

The portion along Station Street now under construction. Note the finished First Stage at the back and the reinforced concrete framework of Stage 2.





General view of completed portion of East Printing Hall. Note the air conditioning ducting, Diagrid roof and lighting arrangement. The wall on the left is a temporary screen. Stage 3 is being constructed at the other side of this screen.

products will be despatched via the East Loading Dock.

There is an extensive central basement with subways serving the whole of the building with heat, light, power, compressed air and other services, and the Ground Floor houses the following Departments: Departmental Offices, Paper Warehouse, finished products, Engineer's Workshops, Account Book and

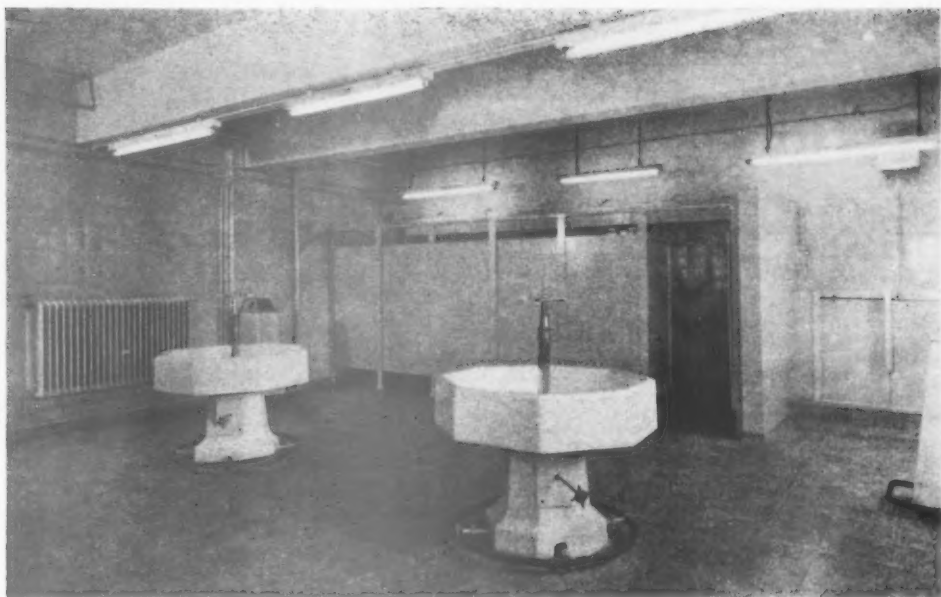
Diary Printing, Toilet Roll manufacturing, Relief Stamping, Book back stripping, Photo Lithographic Dept., baling and despatch.

The letterpress, lithographic, cartons and compositors are to be accommodated on the first floor in two large printing halls. The bindery department will be on the second floor.

Cloakroom and lavatory accommodation has been

General view looking towards the N.W. Corner from the centre of the building across the West Printing Hall.





Typical Lavatory. Note: 3 point hot air hand dryers. Ablution fountains with temperature controlled water spray operated by the foot ring. Corbel type w.c.s with self-opening seats.

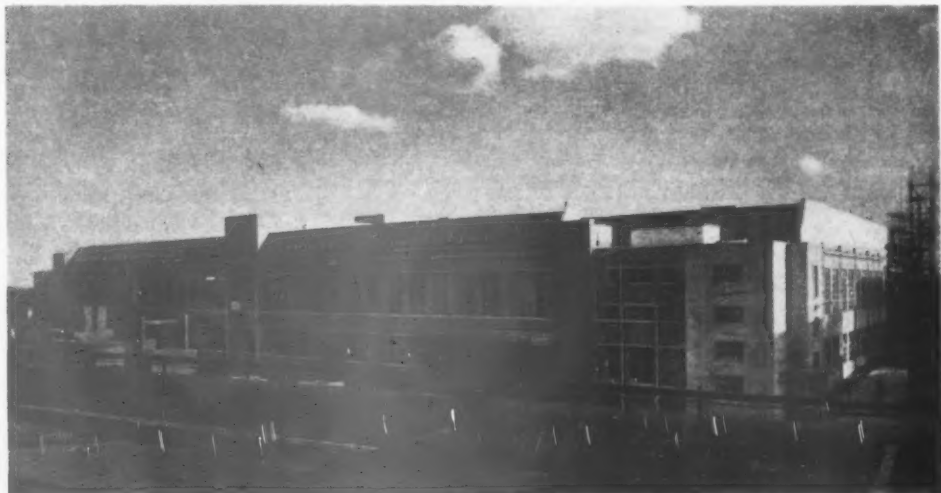
evenly dispersed so that no workman has far to go. A large Air Conditioning plant will be installed on the roof to maintain a regulated humidity and supply of cleaned warm air to the main production rooms and halls.

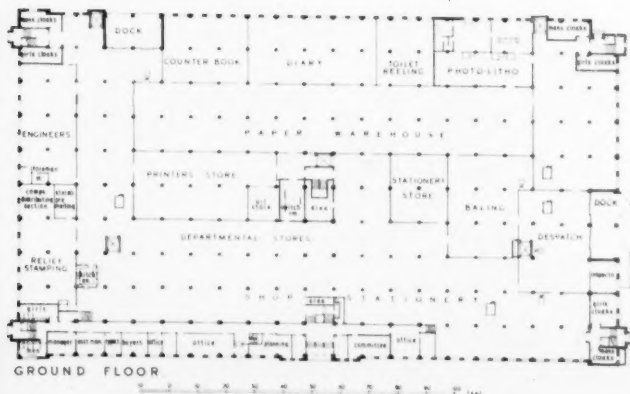
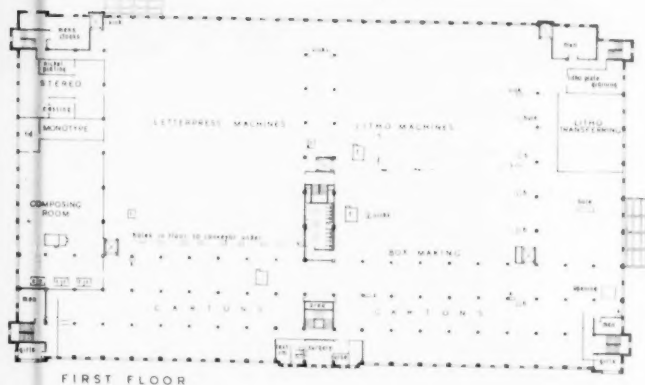
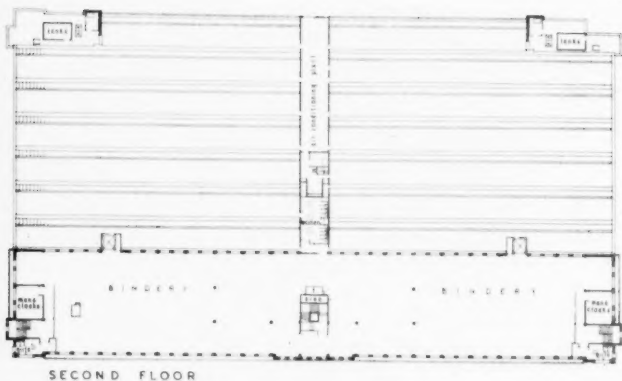
Steam, power and light are provided from the firm's own Power House and particular attention has been given to the lighting, which is being carried out by Messrs. Boots Electrical Engineers.

The framework is of reinforced concrete with floors designed to carry a superimposed load of 4 cwts. a

ft. super and over the Printing Halls is a North light roof constructed on the Diagrid principle with unrestricted spans of 140 ft. x 168 ft. The south slopes are covered with concrete units lined on the underside for insulation. The production floors are finished with wood blocks and the walls plastered; other floors are of steel-crete. The outer panel walls are of brickwork with Portland Stone facings to the East, South and West elevations. This treatment was favoured by the Authorities to save bricks and also to enhance the appearance of the locality.

North or back elevation showing the completed first stage. Note: The diagrid roof members showing through the roof glazing. The elevation is in brickwork. The loading dock canopy is of reinforced concrete.





NEW PRINTING WORKS
STATION STREET
NOTTINGHAM
ARCHITECT: PERCY BARTLETT, F.R.I.B.A.

Engineering Services are under the supervision of Messrs. Boots' Chief Engineer.

The Quantity Surveyors are
Messrs. Gleeds.

Clerk of Works, Mr. W. Drake.

GENERAL CONTRACTORS: GILBERT-ASH LTD.

Air Conditioning and Heating: Young, Austen & Young Ltd.

Asphalte: Val de Travers Asphalte Paving Co. Ltd.

Blinds: Avery's.

Doors: Gardiner, Sons & Co. Ltd. (Main Entrance); Luxfur Ltd. (Steel); Potter Ray Ltd. (Loading Dock).

Lifts: Express Lift Co. Ltd.

Partitions: Crittall Manufacturing Co. Ltd. (w.c.); James Gibbons Ltd. (Steel).

Reinforced Concrete: The Trussed Concrete Steel Co., Ltd.

Roof Glazing—Aluminox: Williams & Williams Ltd.

Roof Linings: British Plaster Board Ltd.

Runways and Conveyors: Herbert Morris Ltd.

Sanitary Ware: Doulton & Co. Ltd.

Sprinkler Installation: Mather & Platt Ltd.

Steel-Crete Flooring: Steel-Crete Ltd.

Stonework—Reconstructed: Croft Granite
Brick & Concrete Co. Ltd.

Terrazzo: Art Pavements & Decorations Ltd.

Wall Tiling: Carter & Co. (London) Ltd.

Windows—Steel: Luxfer Ltd.

Wood Flooring: R. W. Brooke & Co., Ltd.

HOUSING ACT, 1949. PART II. HOUSING IMPROVEMENTS BY LOCAL AUTHORITIES AND OTHER PERSONS

PRACTICE NOTES

A. GENERAL

1. Meaning of "Improvement of Dwellings"

Experience of the working of the Act has shown that there is considerable misapprehension as to what constitutes "Improvement of dwellings" (i.e. improvement works other than the provision of dwellings by conversion).

The Act was designed to assist the carrying out of any works, other than works of ordinary repair and maintenance, which add to a house which is of sound construction and in good repair amenities and conveniences which are normally provided in a house of modern construction and which have come to be regarded as necessary for a pleasant and healthy life. That a property is old is no bar to an application for grant so long as the standards of fitness mentioned in Appendix III of Circular 90/49 are complied with. In the matter of planning, the aim should be as high a standard as reasonably practicable having regard to the arrangements of the existing dwelling and cost.

2. Examples of works within the scope of the Act:

- (a) The provision of bathrooms where none exist at present and indoor sanitation.
- (b) The provision of additional bedroom or living room accommodation.

The provision of the additional accommodation must be reasonably necessary to meet the requirements of the family occupying the house after the works are completed, e.g. to relieve overcrowding or to allow for the proper segregation of the sexes. Additional bedroom accommodation built over other approved improvement works, e.g. a scullery or bathroom (but not a garage) may be allowed irrespective of size of family.

- (c) Conversion from cesspool to main drainage; provision of septic tank; privy conversion, etc.

Where a local authority contribute towards the cost of privy conversion under Section 47 of the Public Health Act, 1936, the contribution should be deducted from the expenses of carrying out the improvement works in the calculation of improvement grant.

The enlargement of a cesspool cannot be regarded as improvement work unless it is necessary to take additional drainage from new baths, w.c.s, sinks, etc. The possibility of connecting to main drainage should be investigated before enlargement of an existing cesspool or the provision of a new septic tank is approved for grant.

- (d) Internal servicing for water, gas or electricity.

The cost of installing water, gas or electricity in a house should only be admitted where a mains supply is either already available or there is definite information that it will be available in the very near future, or in connection with a new private source of supply.

It should be noted that subsection 3(c) of Section 20 precludes any grant in respect of works carried out on land not owned by the applicant or held by him on a lease with not less than thirty years to run.

- (e) Works necessary to eliminate inherent structural defects.

These include, e.g. the provision of a damp-proof course where this is the only effective remedy against rising dampness; excavation around the building; new ground floors where the existing floors consist only of rammed earth, bricks, or stone flags, etc.; the raising of the levels of ceilings, the lowering of the levels of floors and, if necessary, works in connection with the raising of the level of the roof to achieve a minimum height of 7 ft 0 ins. from floor to ceiling for habitable rooms (see paragraph 3(viii)); a new staircase where the existing staircase is entirely inadequate as a staircase or its removal and replacement is necessary on account of a desirable replanning of the dwelling as part of the proposed improvement.

- (f) The installation of a hot water system, domestic washing facilities, including a sink and washbasin.

The heating appliances should be of the types in the approved list issued as a Supplement to Circular 170/48.

- (g) The provision of new windows.

The cost of providing new windows may be admitted where required as part of the improvement work, e.g. to a new bathroom, bedroom, larder, etc., or to increase the window size for compliance with bye-law requirements but not otherwise.

- (h) The rebuilding of ground storey walling to take first-floor additions.

Grant may be paid in respect of the rebuilding of single storey back addition where necessary for the carrying out of works of improvement over it.

- (i) The provision of a well-ventilated larder and storage cupboard accommodation.

Larder and cupboard accommodation allowed as part of the proposed improvement work should not exceed the standards laid down in the Housing Manual.

- (j) All works connected with the conversion of non-residential buildings into dwellings.

In the case of the conversion into a dwelling or dwellings of buildings other than houses, all the works necessary for improvement, repair, maintenance and replacement may rank for assistance.

- (k) The provision of access paths.

The provision of a proper surfaced path from a house to the

domestic outbuildings and the paving of small areas at the rear of buildings constitute improvement works. Where a house is situated some distance from the nearest road or highway, the reasonable cost of a path (on land owned by the applicant or held by him on a lease with not less than thirty years to run) from the house to the road but not the provision of a surfaced road to accommodate vehicles, would similarly rank for assistance.

- (l) New wells.

The provision of a new well is a proper subject for grant whether or not there was previously a well in existence on the property.

3. Works not within the scope of the Act

- (i) Works which have been commenced or completed by a local authority before the Minister's approval for the purposes of Section 15 of the Act has been obtained:

- (ii) Works which have been commenced by a private owner prior to obtaining the formal approval of the local authority under Section 20 of the Act;

- (iii) Works to "Tied" houses ("service accommodation");

If assistance is given, a proper tenancy must be created which will give to the tenant the full protection of the Rent Restrictions Acts against summary eviction in the event of the employment terminating.

In the case of a house owned by a local authority the house must be included in the Housing Revenue Account and form part of the pool of accommodation available for meeting the general needs of the district (Second Schedule to the Act, paragraph 5).

- (iv) Works to houses erected with aid of subsidy, notwithstanding the fact that the subsidy may have ceased to be payable;

- (v) Works to houses erected since 1945;

- (vi) The reconstruction or conversion of houses or other buildings of which only ruins or remnants of walls remain, or works consequent on war damage or damage by fire;

- (vii) Works to houses, the habitable rooms of which are below 7 ft. 0 ins. in height and cannot be brought up to this height;

An exception may be made in the case of a house of special historic or architectural merit, or where there are exceptional compensating features to offset this defect.

- (viii) Works to houses in which bedrooms would still be inadequately ventilated owing to the relative positions of doors, windows and flues;

- (ix) The widening or cleaning out of an existing wall;

- (x) The provision on land not owned by the applicant or held by him on a lease with not less than 30 years to run of connections to water, gas or electricity mains or sewers;

- (xi) The enlargement or repair of cesspools (see also paragraph 2(c));

- (xii) Replacements (including the reinstatement of any existing fittings and equipment, cookers, sinks and drains, fireplaces, etc.), not necessitated by replanning consequent upon the improvement works;

- (xiii) Works carried out to that part of a dwelling which is used for business purposes;

- (xiv) Tiling of walls of bathrooms, kitchens or sculleries, or any other works or fittings in excess of a reasonable standard;

- (xv) Works to houses converted into flats with a common staircase and entrance, where the flats will not be entirely self-contained;

- (xvi) Works to dwellings which will not be entirely self-contained;

- (xvii) Works to dwellings where any part of the external walls will not be weatherproof, e.g. 4½ ins. brick;

- (xviii) The improvement of "hostels";

- (xix) Works to almshouses, unless after the execution of the works they will be separate dwellings fully complying with the requirements of paragraph 9 of Appendix III to the Circular;

- (xx) The conversion of dwellings in relation to which conditions contained in the Housing (Rural Workers) Acts, 1926 to 1942, for the time being apply (see Section 28(i) of the Housing Act, 1949).

4. Planning

The standard of planning should be as high as practicable. In particular there should normally be separate access to each bedroom from a hall, lobby or living room, as the case may be and the bathroom and/or w.c. should not be so placed that the only access to it is from a bedroom.

5. (a) Improvement works and ordinary repairs not incidental to the improvement works together costing less than £600

Where an application shows that major works of ordinary repair not incidental to the improvement works are necessary and the dwelling could not possibly be regarded as complying with the requirements of paragraph 9 of Appendix III until those works have been carried out, it should not be approved unless those works are carried out.

Since it will often be more convenient from every point of view for the works of improvement and the ordinary repairs to be included in one contract, an informal promise of an improvement grant may be given conditional upon the carrying out of the specified works of ordinary repair. The actual approval under Section 20 of the Act should be given as soon as the local authority are satisfied that these works have been or will be carried out, e.g. by inspection of the contract. The cost of the repairs will, of course, be excluded in assessing the grant.

- (b) Improvement works and ordinary repairs not incidental to the improvement works together costing more than £600
- (i) Where the ordinary repairs account for the whole of the excess over £600 and the local authority are reasonably satisfied that, without those repairs, the dwelling will conform with the specified requirements after the improvement works have been carried out, the application may be approved, but the cost of the repairs must of course be excluded from grant.
 - (ii) Where, however, the excess over £600 is due wholly or in part to the ordinary repairs and the dwelling will not conform with the specified requirements unless those repairs are carried out, the application cannot be entertained since the £600 maximum would be exceeded.

6. Grouped Schemes

It is essential in grouped schemes that the cost should be apportioned to each dwelling in the scheme and that where ordinary repairs are also involved the estimated cost to be given in respect of each dwelling should exclude the cost of the ordinary repairs which are not eligible for assistance.

In view of the disproportionate amount of work which would be involved if, in multi-storied blocks of flats, the estimated cost had to be assessed separately for each flat, the Minister is prepared to allow the averaging of the estimated cost of improvement works where all the flats in a multi-storey building form the subject of an application for assistance. He is not, however, prepared to agree to this principle being adopted in the case of rows of terrace houses.

7. By-law Provisions

Consideration will be given to an application for the relaxation of bye-laws in any case in which they would prevent the execution of improvement works which, in the opinion of the local authority, should be facilitated.

8. Rents

Information as to the proposed rents of houses after the improvements or conversion have been carried out is required before any decision on a proposal can be reached. In the case of improvement proposals of a local authority, the existing rents also are material to its consideration since, unless a loss to the local authority is foreseen at the outset as a result of carrying out the improvements, no case arises for consideration of assistance under the Act.

9. Examination of Proposals

(a) Plans

It is essential for the proper consideration of both local authorities' and private owners' proposals that adequate plans should be furnished showing the dwellings, or buildings, "as existing" and also "as proposed" after the execution of the works.

The heights of rooms should also be given since, as mentioned in paragraph 3(vii), a minimum height of 7 ft. 0 in. for habitable rooms should be required save in very exceptional circumstances. A site plan showing the situation of the dwelling under consideration in relation to the surrounding properties is also required.

If the owner obtains technical advice, any fees payable from part of the expenses of carrying out the works of improvement.

(b) Specification and Estimate

The specification and estimate must be in sufficient detail to enable the local authority and the Department to determine what expenses are to be approved and to distinguish clearly between—

- (i) the improvement or conversion works, and the repairs incidental to the carrying out of these works; and
- (ii) works of ordinary repair and maintenance, which are not eligible for assistance under the Act (except in cases of "conversion" only—see paragraph 2(p)).

They should be examined also with a view to securing economy in the use of scarce materials, particularly timber. (See Circular 100 49.)

(c) Environment

In considering any proposal, regard should be had not only to the house or houses (or building or buildings) immediately affected by the improvement or conversion, but also to the adjoining buildings, the general character of the neighbourhood and the rights and interests of adjoining owners.

B. IMPROVEMENTS BY LOCAL AUTHORITIES

10. Minister's prior approval required in the case of local authorities' schemes

Paragraph 15 of Appendix III to Circular 90 49 sets out the particulars which should accompany all individual proposals of local authorities under Section 15 of the Act submitted for approval.

Attention is particularly drawn to the necessity for obtaining such prior approval.

11. Purchase of houses and other buildings with a view to conversion or improvement

It is particularly desirable in all cases where a local authority propose to purchase a property with a view to carrying out conversion or improvement works with assistance under the Act that the views of the Department should be sought before any definite steps are taken to acquire the property.

12. Improvement of houses not already in the Housing Revenue Account

Attention is drawn to paragraph 5 of the Second Schedule to the

Act of 1949, which brings dwellings provided or improved with assistance under the Act into the Housing Revenue Account.

13. Limits of Expenditure

The limits of £100-£600 of estimated cost prescribed in the Act for privately-owned houses will be applied also in the case of houses owned by local authorities, and generally no proposals outside these limits will be approved unless the house is of historic or architectural interest, or there are other exceptional merits.

C. IMPROVEMENTS BY PRIVATE PERSONS

14. Business Premises. Section 23 (1) (a) of the Act

Section 23(1)(a) of the Act was intended to enable dwellings, such as farmhouses, which are used for both residential and business purposes to be brought within the scope of the Act. Assistance can be granted, however, only in respect of the cost of the improvement of the dwelling accommodation. Where works such as the provision of drainage, water supply or electricity are carried out, which benefit both the dwelling and business accommodation, the cost of such works must be apportioned.

15. Licensing

Improvement works in excess of the free limit of £100 require a building licence, and before approving the making of improvement grants in individual cases the local authority must satisfy themselves that the necessary licence can be issued.

As indicated in paragraph 11 of the Notes for Applicants, it is not intended that applicants should make a separate application for a building licence but that Form B should be treated as constituting such an application. In the case, however, of a farmhouse, application for a building licence should be made to the Regional Licensing Officer of the Ministry of Works.

16. Prior approval by the local authority before works are commenced

The form in which a local authority's approval of an application for an improvement grant should be given is set out on page 23 of Circular 90 49.

Attention is drawn to the necessity for obtaining the approval of the local authority before commencing works in Note 1(a) of the Leaflet entitled "Notes for applicants."

The requirement of Section 20 of the Act in this respect cannot be waived under any circumstances. Where, however, an applicant has commenced work in genuine ignorance of this provision but suspends operations pending approval of his application may receive consideration but only in so far as it relates to improvement works not already commenced.

17. Grant not available for subsidised houses

As in the case of houses owned by a local authority, no improvement grant is payable in respect of any privately-owned dwelling the erection of which was aided by Exchequer subsidy. Any application received in respect of a house built since 1919 should be carefully considered from this aspect.

18. Repayment of grant in the event of a sale of the house

If a house in respect of which a grant has been made is sold to a person for his own occupation, the grant will have to be repaid, but, if it is sold and the purchaser undertakes to let the house and otherwise to comply with the conditions of the grant, no breach would be involved.

19. Contingencies

No amount should be included under this head in the approved estimate, which is the amount of the expenses which in the opinion of the local authority are properly ascribable to the execution of the improvement works.

20. Works carried out with the applicant's own labour

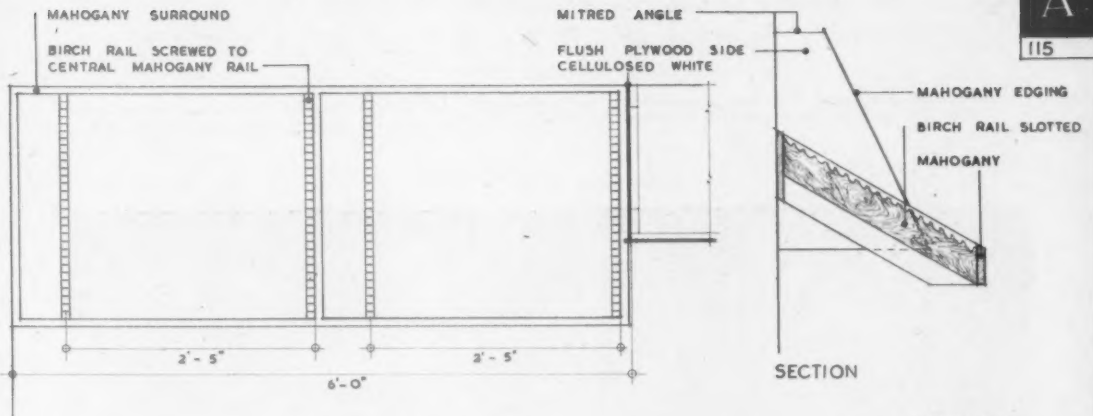
Where an applicant for grant indicates that he intends to carry out the proposed works by his own labour, i.e. to do all the work himself or with unpaid labour, no sum in respect of the cost of his own labour should be included in the estimate for the purpose of either grant or licence; only the cost of materials should be taken into account.

21. Borrowing by local authorities for the purposes of the payment of improvement grants

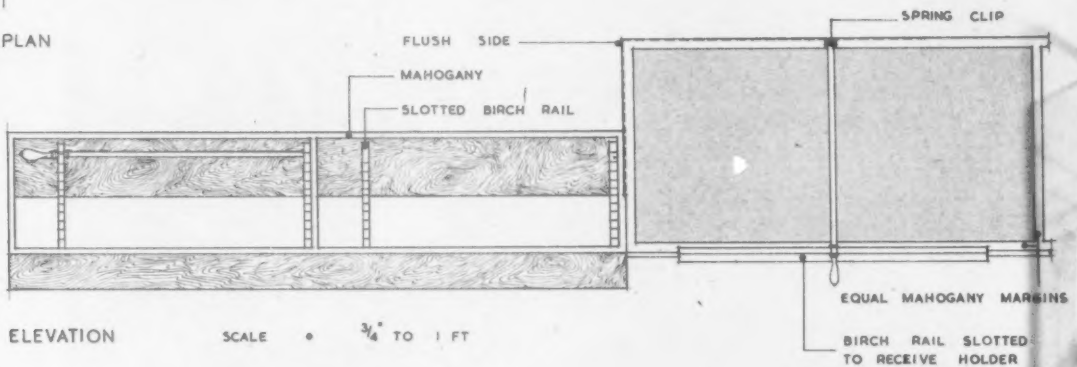
The Minister is prepared to issue for each six-monthly period, up to a maximum of one-half of the licensing ceiling, consent to a loan to the local authority to cover the grants likely to be made in that period. The moneys required would, of course, only be raised as and when required.

22. Advances by local authorities under Section 4 of the 1949 Act in addition to improvement grants

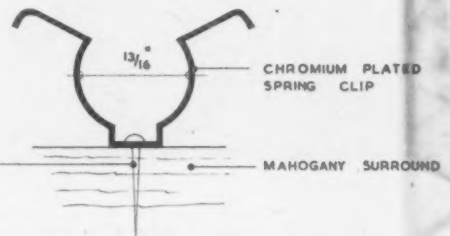
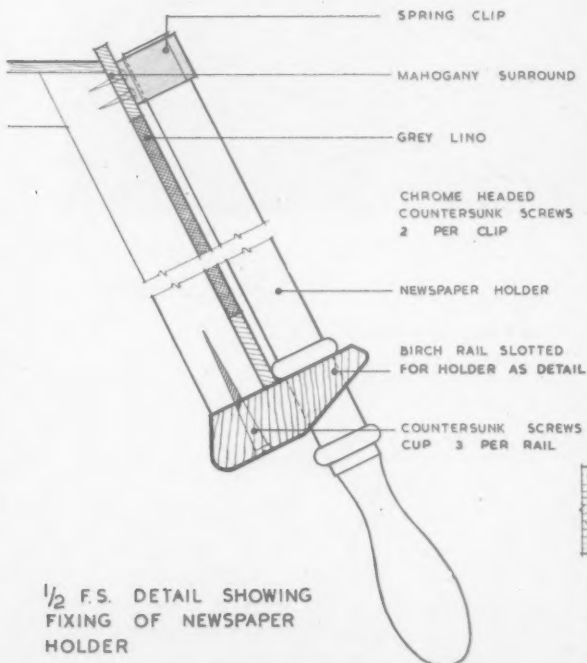
Advances may be made by local authorities under Section 4 in addition to grants under Section 20. It is not intended to attach to advances under Section 4 any conditions other than those prescribed by the Section or to charge rates of interest in excess of those which may be charged for similar advances under the Small Dwellings Acquisition Acts, no approval on the part of the Minister is required and the local authority may proceed to operate the provisions of Section 4 forthwith. If, however, additional conditions are proposed to be attached to advances, or different rates of interest are contemplated, it will be necessary for the local authority to submit a draft of the conditions for the Minister's approval under sub-section 1 of the Section before any advances can be made.



PLAN



ELEVATION

SCALE • $\frac{3}{4}$ " TO 1 FT



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CURRENT MEASURED RATES (LONDON)

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These apply to new work of normal character and some size. The rates are for time and materials only, and carry 10 per cent in excess, so the appropriate essential on-costs should be added. The basis cost of material used in the calculation of these prices is taken from the foregoing table.

ESSENTIAL ON-COSTS

Fees payable to the London County Council in respect of services rendered by the District Surveyor:

For new buildings of ordinary construction exceeding 5,000 cubic feet, for every 1,000 feet or part of same up to 1,000,000 cubic feet 1s. 6d., together with an additional sum of £1 10s. at + 1/6

After which allow per 1,000 do. at + 9d.

For alterations and additions:

When £100 the sum of £2 10s., and a further 12s. 6d. for every £100 or part of same beyond, up to £1,000 at + 12s. 6d. per 100

When over £1,000 the sum of £8 2s. 6d., and for every £100 or part of same beyond 3s. at + 3s. per 100

Fees in respect of public buildings are as above but with fifty per centum added + 50%

Fees in respect of means of escape in case of fire are 1/5th of the above or the sum of £2 if greater or in the case of a one-storey building £1 1/5th

Steel framed or reinforced concrete buildings carry a fee of twice the above x 2

Allow for Unemployment and Public Health, Holidays with Pay Scheme, Workmen's Compensation, Third Party Risk, Welfare, Travelling and Guaranteed Week over the total contract cost of builder's own work 6%

Allow for Fire Insurance do. 1%

Allow for Water for use on the works and apparatus do. say £10

Allow for hoarding, gantry or similar licences in the City of London say 2/6

Do. under Borough Councils per ex month say 2/6

Allow for Office, Fire, Attendance on Clerk of Works, etc., per week say £1

Supervision, etc. assessment £4,000 £6,000 £12,000 £24,000 £50,000

Contract value

Cost of administration 6% 5% 5% 4% 4%

Agent or foreman (each) 5% 4% 3% 2% 1%

Timekeeper or Watchman (each) 2% 2% 1% 1% 1%

SPOT ITEMS AND DEMOLITION, ETC.

Per foot run

Hoarding erected and removed 10/-

Planked gangway with handrail, etc. do. 6/-

Proper gantry, do. 60/-

Sleeper roadways 10/-

Needling, strutting and shoring including all labours and use and waste in erection and removal Per foot cube

Breaking up and removing hard masses of concrete or brickwork, work, etc., found in foundations 50/-

Per yard

ALTERATION-DEMOLITION—

Cutting out cement concrete or brickwork in small quantities 1/- 1/8 2/6 45/-

Do. if either in very small quantities or reinforced 1/6 2/6 3/9 68/-

Debris filled into baskets and removed from inside to outside of building 3 1/4d. 5 1/4d. 7 1/4d. 10/6

SCAFFOLDING

Per Yard superficial

Period—

1 month. 3 months. 5 months

Putlog type—4' 6" lift 3/4 5/2 7/-

Do. — 6' 0" do. 2/8 4/2 5/8

Independent type—4' 6" lift 4/5 7/2 9/11

Do. — 6' 0" do. 3/5 5/6 7/7

EXCAVATION

Per Yard Cube

Easy Normal Fairly

sand. ground. hard.

By hand:: reduce levels and get out 3/6 5/- 6/3

Do.: surface trenches and do. 5/9 8/6 10/6

Borrowing for 25 yards 1/8 1/11 2/2

Filling and ramming 2/6 3/- 4/-

Load and remove from site 9/- 10/- 12/-

Plank and strut per foot super. 5d. 5d. 5d.

By Machine: Per Cube Yard.

Dig in bulk and load lorry 1/3 1/10 2/4

Lorry standing to load, and travel 5 miles.

tip and return 3/8 4/5 5/-

Adjust for each mile more or less, to tip. 6d. 7d. 7 1/4d.

CONCRETE

1 1/2 in. Ballast Aggregate. Per yard cube
6:1 Cement concrete in foundations 52/-
Do. around grillages 54/-

REINFORCED CONCRETE

4:2:1—1/2 inch concrete, worked around reinforcement, between formwork in the following (at various levels):

Foundations and surface beds 56/- Per cubic

Walls, 12 inches thick or more 62/- Yard

Sectional Lintols and Columns and Braces and

inches beams casings and projections

Up to 36 2/10 3/- 3/0 1/2 Per cubic ft.

36 to 72 2/9 2/11 3/- do.

72 to 144 2/8 1/2 2/10 2/11 do.

over 144 2/8 2/9 2/10 1/2 do.

Walls 6 inches thick 10/10 Per super yard

Do. 9 inches thick 15/7 1/2 do.

Suspended floors average 6 inches thick 11/8 do.

REINFORCING RODS (round) bent and placed—

Per cwt. 1 in. 1 1/2 in. 2 in. 3 in. 4 in. 5 in. 6 in. 8 in. 10 in.

In floors and beams 49/- 43/3 42/6 38/3

In walls 52/6 45/6 44/6 39/9

In columns 56/6 49/6 48/6 43/6

FORMWORK and Supports (4 times use)—

Floor soffits. Beams. Walls. Columns.

14/- per Yard. 1/9 1/6 1/9 per super foot.

BRICKWORK

BRICKWORK per YARD superficial reduced to ONE BRICK

in thickness (scaffold to add)— In 1:3 cement mortar.

Flettons or other common backing bricks at 90/-

per 1,000 25/9

Mild Stocks or do., at 190/- per 1,000 37/-

Second Stocks or do., at 215/- per 1,000 39/8

Southwater engineering (No.2) or similar bricks, at

228/6 per 1,000 43/6

Do. (No.1) or do., at 258/6 per 1,000 46/9

Blue Staffordshire wire cut bricks, at 373/- per

1,000 58/8

Deduct if 1:1:6 Cement-Lime mortar is used in

lieu of 1:3 Portland Cement mortar 2 1/4d

Add if brickwork commences above ground level 2/3

Do. if in backing to masonry including cutting and

waste for bonding 2/-

Do. If circular-on-plan 4/-

Do. If in underpinning 4/6

BRICKWORK IN THICKNESSES NOT REDUCED—

Per yard superficial. Brick. Half-finished 11" Hollow

on edge. walls. Brick walls. fair on wall with

sides. both and G.I.

In Flettons or similar 11/- 14/6 27/- 30/6

In second stocks or do. 15/10 21/4 40/- 44/-

Add: for pointing as work

proceeds, per side 1/- 1/- 1/- 1/-

Thickening to old walls, including Fletton Stock

cutting, toothing and bonding to

same an average total thickness of

1/2 brick 35/- 45/6 Per yard

Do. all as last but an average total

thickness of 1 1/2 bricks 46/6 64/- do.

WALLS BUILT IN SUPERIOR BRICKS—

In 1:3 Cement mortar, fair faced and pointed on both sides as the

work proceeds:—

Half-Brick thick. One Brick thick.

In first quality Stocks at 225/- 24/1 42/8 Per yard

In red facings at 195/6 22/3 38/6 super.

In bluepressed facings at 414/6 36/- 66/- do.

GENERAL AND SUNDRY—

Cut tooth and bond new brickwork to old, per inch

in width of wall 3d. per ft.

Damp proof course, double slate, horizontal 1/10 super.

Do. as last, but vertical 2/3 do.

Do. bitumen, Hessian base, do. 9d. do.

Frames, bed and point in cement mortar, one side. 3d. per ft. run

Window board of 6" x 6" x 1" rounded on edge quarry

tiles, bedded, pointed, cut and fitted 2/- do.

Terra cotta air bricks built in and 9" x 6" 9" x 9"

pointed, including flue 4/- 7/- each

CURRENT MEASURED RATES (Continued)

BRICKWORK—Continued

Chimney pots, plain red, set and flanchued in cement mortar ..	9/6	1ft. high 14/- each	2ft. high 5ft. to 10ft. super.
Metal windows, assembled, hoisted and fixed, lugs cut and pinned and frames bedded and pointed one side in cement mortar, of sizes as given ..	7/6	9/- each	
	10ft. to 20ft.	20ft. to 40ft. super.	
Leaving holes through walls for pipes and afterwards making good ..	14/-	25/- each	
	2d. per in. in depth	4d. per in. in depth	
Cutting holes through do., for pipes and afterwards do. ..	6d. do.	9d. do. each	
Cut mortices in brickwork or concrete for bolts or dowels and run in with cement grout ..	6d. per in. in depth	each	
Holdfasts of stout hoop iron bent holed and screwed to frame and built in ..	9d.	each	

FACING—

Extra only over common brickwork (92 per 1,000) for facing with superior bricks in <i>Flemish bond</i> and pointing as the work proceeds.			
Rustic Flettons (117/-) ..	2 10	per yard super.	
White (136/-) ..	4 6	do.	
First Stocks (225/-) ..	11 3	do.	
Reds (195/6) ..	8 8	do.	
Blue pressed (414/6) ..	25 4	do.	
If built in English bond, Add 10% to above.			
If do. half-brick stretcher bond, Less 25% off above.			

COPING—

All labour and material in forming brick-on-edge coping with two courses of roofing tiles under and cement weather fillets on both sides, built in cement and pointed as the work proceeds.

Per foot run.	To wall 9" thick	To wall 14" thick
In picked Flettons ..	2 11	4 3
In first quality Stocks ..	3 7	5 3
In red facings ..	3 9	5 6
Plumbing angles ..	2d.	per foot run
Fair cutting ..	9d.	do.
Fair raking cutting ..	1 3	do.
Fair circular cutting ..	1 7	do.
Fair squint or birdsmouth ..	1 6	do.

ARCHES

Extra over Fletton brickwork for forming window head with foot run red facing bricks set on end and with 4½ soffits and pointing ..	2 -
Do. for rubbed and gauged flat arch in red rubbers set in putty with fine joints ..	10 -

PARTITIONS

(over 100 Yards)	Per yard super—
Concrete slab partitions built in cement mortar ..	6 9 7 8 8 8
Hollow terra-cotta do. ..	7 3 8 9 2
Cutting and bonding at angles, intersections and ends ..	4d. foot run.

PAVING 1in. 1½in.

Granolithic finished trowelled gauged 5:2:1 6 2 7 5 8 yard super	
1 x 5 in. skirting with square top edge and cove at bottom 1 4 foot run	
Add to granolithic paving for finishing top with Carborundum ..	1 6 yard super
2 in. Reconstructed stone paving slabs and bedding and grouting in ash mortar ..	13 6 do.
Cutting and waste on last ..	6d. foot run
Cutting and fitting and make good around gulley or similar ..	1 6 each
½ in. pitchmastic flooring laid in one coat on a sprinkling of asphalt powder, on concrete base (measured separately) ..	9 - yard super
½ in. x 6 in. Red quarry tile paving and do. ..	19 6 do.
Angles in last ..	1 3 foot run
Jointless flooring, ½ in. thick ..	3d. each
½ in. blue paving ..	20 - yard super
Fireclay bricks ..	37 - do.
5in. x 10in. Granite concrete kerb ..	7 6 yard run

ASPHALTE

½ in. Asphalt in two layers on screeded concrete ..	Mastic 15/9	Rock 22 6 per yard super.
Fair rounded edge ..	6d.	6d. per foot run
½ in. skirting 6 in. high with chamfered top edge and angle fillet at bottom and tucking top into groove in wall ..	2 9	3 4 do.
Angles ..	9d.	10d. each
1½ in. Asphalt in three layers in horizontal tanking ..	21/-	31 6 per yard super.
Do. but vertical ..	27 6	39 8 do.
Double angle fillet ..	1 6	1 8 per foot run
Collars ..	3/-	3 6 each

DRAINAGE

Per yard run	1 foot in depth ..	3/-
Excavate trench for drain and throw out, plank and strut to sides of trench as necessary and return, ram and consolidate earth after drain is laid and fill carts and remove surplus earth ..	2 do.	5/-
	3 do.	9 9
	4 do.	13/-
	5 do.	16 3
	6 do.	26 10
	7 do.	31 9
	8 do.	36 9
	9 do.	41 9
	10 do.	46 8
	11 do.	62 6
	12 do.	69/-
	Per yard run	
	4in. 6in. 9in.	
Portland cement (1:6) concrete bed under drain pipes and benching up on both sides ..	5/-	5 10 7 3

Glazed stoneware drain pipes with socketted joints laid and jointed with a ring of rope yarn dipped in cement grout and a Portland cement joint (1:1) ..	4 in.	6 in.	9 in.
Best quality in 2 ton lots ex truck ..	1 11½	2 11	5 0½
British standard do. in do. ..	2 1	3 1	5 3½
Add to either of the above if ex wharf in lots of 100 pieces or more ..	2½d.	3½d.	6½d.
Add to either of the top two items if as last but less than 100 pieces ..	3½d.	5½d.	9½d.
Add to any of the above classes if tested ..	2½d.	4½d.	7½d.
Extra over for bends, each ..			The cost of two feet of similar class pipe as above.
Ditto Junctions, each ..			Ditto one-and-three-quarters feet of do.

Stoneware gulley and jointing to drain and embedding in concrete ..	each	19 6	21 -	32 6
Add for horizontal inlet ..	do.	3 -	3 -	3 -
Do. vertical inlet ..	do.	4 4	4 4	4 4
Do. black iron grid ..	do.	1 2	2 3	4 6
Glazed stoneware interceptor with cleaning arm and stopper and building into side of chamber and connecting to drain and surrounding with concrete (+ 65% on list) ..	each	43 -	56 -	90 -

IRON DRAIN PIPES

Heavy cast iron socketted and laying and jointing in molten lead—	Per foot run	
4 in. 6 in.		
In main runs ..	8 1	11 10
In branches ..	8 7	13 -
Extra over last for bends and extra joint ..	22 6	39 8
Do. on do. for junctions and extra joint ..	32 -	59 -
Cast iron gulley with 10½ in. inlet and 4 in. outlet, composed of hopper and trap, and 9 in. extension piece and 10½ in. grating, and jointing all together, and jointing to drain and surrounding in concrete ..	95 -	
Do. rain water shoe with vertical inlet and inspection cover, and joint up and embed as last ..	45 -	90 -

MANHOLE SUNDRIES

	4 in.	6 in.
Salt glazed straight half-round main channels ..	each	4 6 6 3
Do. curved ..		9 - 13 -
Do. three-quarter section splayed channel bends (Barrons or similar) ..	do.	11 3 16 6
Heavy cast iron manhole steps ..	do.	5 - -
Fix only manhole covers ..	do.	8 - -
4in. Mica flap, brass faced, fresh air inlet valves and fix with molten lead joint ..	do.	24 -

ROOFER

ASBESTOS SHEETING AND TILING—		
In roofing with side laps and 6in. horizontal lap, secured to steel purlins with necessary bolts ..	90	per square
Eaves filler pieces ..	1 7	foot run
Adjustable ridge ..	3 -	do.
Barge boards ..	2 -	do.
Plain roofing tiles, machine made, sand faced, 4in. gauge, nailed every 4th course with 1½in. galvanized nails to battens (measured separately) ..	167 -	per square
Extra over last for top edge or abutment cutting ..	10d.	foot run
Do. for double course at eaves ..	1 1½	do.
Do. for verges, undercloak and bedding and pointing 2/- ..	do.	
Do. Valley tiles including cutting and waste on both sides ..	7 10	do.
Do. Bonnet hips and do. and bedding and pointing ..	8 6	do.
Half-round ridge and bed and point ..	2 9	do.
Fixing soakers ..	1 -	dozen

Bituminous felt roofing in two layers, laid breaking joint and bedded with hot mastic and finished with fine dry grit ..	7 -	yard
Do. but in one layer only ..	5 -	super.

CURRENT MEASURED RATES (Continued)

ROOFER—Continued

	Per square	Per foot lineal
WELSH SLATING—	12" x 10" 18" x 10" 20" x 10"	
3 in. lap, 2 zinc nails to each slate	230	278
Additional labours—		
At tops, verges and abutments—straight	1 2	1 4
Do. —raking	1 9	2 1
At hips and valleys (each side)	1 9	2 1
At eaves, double course	2 4	2 8
Do. to falls	3 6	4 3

FLOORS AND FLATS

	Span	12 feet	16 feet
Constructed in hollow tile in-situ or in precast units hoisted, bedded and fixed—			
Superimposed load in lbs. per foot super.		33	35.9
Per yard super.		100	38.6
		150	40.9
An allowance of 20 lbs. has been made to cover dead load in surface finishing.			
Fair edge to slabs		6d.	per foot run
Play cutting and waste		1 6	do.

CARPENTER AND JOINER

Softwood at minimum control cost.

	Plates	Joists	Rafters	Trusses
SOFTWOOD CARCASSING—				
Labour, materials, waste nails, hoisting and fixing	14 2	15 8	16 4	18 6
FLOORING—				
Rough boarding	79	103	129	
Softwood battens flooring, straight joints, splayed headings	88	110	138	
Do. grooved and tongued	94 6	122	150	
SKIRTING—				
Wrot softwood moulded skirting including grounds and backings plugged.	2 10	3 4	3 8	
Mitres to do.	1 4	per sectional inch.		
Fitted ends	1 d.	do.		

SASHES, Fanlights, casements, borrowed lights, etc.—

	Without bars	With bars
Per foot super—		
2 in. softwood rebated, moulded and fixed	2/-	3/2
Add if fitted with beads	5d.	1/3
Add if hanging on butts	1 6	each

WINDOWS, hung on lines—

	outer linings, 1 1/2 in. pulley	Overall size of frames—
Softwood casement frames, 1 in. inner and stiles, 2 in. sashes, oak sill.	6ft.	21ft. 32ft. 44ft.
Per foot super.	11 2	5 7 4 6 3 8
Window as described		
Add if sashes in squares, about 2 feet super in each	9 1/2	1 1 1/-
Extra for hanging sashes with lines, weights and axle pulleys	21/-	29/- 36/- 44/-

	Sectional area—
Softwood, wrot, framed, rebated, rounded and fixed	4 in. 6 in. 8 in. 10 in. 12 in.
	1 7 1 1 1 2 1 2 1 2 2 6

	Per foot super—
FINISHINGS TO OPENINGS—	
Softwood linings, tongued at angles and tongued to frame including grounds and backings	2 8 3 1 3 7 4 1
Add if crosstongued	4 d. 4 d. 4 d. 4 d.
Softwood wrot rounded on front edge and with tongue at back window board including groove in sill and bearers.	2 8 3 2 3 8 4 2
Add for ends to last notched, returned and rounded	10 d. 10 1/2 d. 11 d. 1/-

	Per foot run—	Sectional area in inches—
Softwood wrot and fixed in bearers, backings, grounds, fillets, and similar	3 1/2 d. 5 d. 7 d. 8 1/2 d. 10 1/2 d.	1 1 1 1 1 1
Add if in short lengths	1 d. 1 d. 1 1/2 d. 1 1/2 d. 1 1/2 d.	
" if plugged to brickwork	3 d. 3 d. 3 d. 3 d. 3 d.	
" if framed as in legs and bearers	1 1/2 d. 1 1/2 d. 1 1/2 d. 1 1/2 d. 2 d.	
" if rebated or grooved or beaded	3 d. 3 d. 3 d. 3 d. 3 d.	
" if chamfered or rounded edges	1 1/2 d.	
" if moulded in architraves, capping, etc.	3 d.	

	Per foot run—
DOOR FRAMES—	
Per sectional inch—	6 in. 8 in. 10 in. 12 in. 13 1/2 in.
Softwood, wrot, rebated, rounded, framed and fixed	1 6 1 9 2 1 2 4 1/2 2 8

	Per foot super.	Number of panels—
2 in. Softwood, square framed and flat panels, both sides, hung on butts	4/-	4 9 5 1 5 5 5 8 6 1
1 1/2 in. do.	3 6	4 3 4 7 4 10 5 1 5 7
Add for each side moulded	3 d.	4 d. 5 d. 6 d. 7 d. 7 d.
Add for do. flush panelled	6 1/2 d.	6 1/2 d. 5 d. 6 d. 6 d.

	Per foot super—
In shelves, table tops, wrot and fixed.	3 in. 1 in. 1 1/2 in. 1 1/2 in.
Do. in divisions and ends framed	1 7 2 1/2 2 5 2 11
Add if crosstongued	4 d. 4 d. 4 d. 4 d.
Add if buttoned	6 d. 6 d. 6 d. 6 d.

SUNDRIES—

	Per foot run
In short lengths	In long Add for cups lengths & screws
Glazing beads, mitred around and fixed with brads	5 d. 4 d. 1 d.
Rounded heel or hollow	4 d.
Tongued and grooved angle	6 d.
Glue blocking	1 1/2 d. per sectional inch.
Mitres	1 d. do.
Fitted ends	1 d. do.

STAIRCASE—

	Per ft. super
1 1/2 in. Softwood treads with moulded nosings, 1 in. risers tongued both edges and glued, blocked and bracketted on and including two fir framed carriages	4 6
Do. but in winders	5 4
1 1/2 in. crosstongued landing in framed carriages	3 8
2 in. moulded string	4 2
2 in. do. ramped	8 4
Ends framed to newel	4/- each
Tongued and mitred angles	1 6 do.
Tongued heading joints	1 6 do.
Ends of treads and risers housed to string	2/- do.
Extra for curtail ends to steps, glued up and veneered riser and solid blocking	60/- do.
Balusters about 2 ft. 9 ins. long, square and framed each end	1 in. 1 1/2 in. 1 1/2 in.
34 in. x 3 1/2 in. square newel, framed	2 7 2 11 3 4
Mahogany moulded handrail (3 in. x 2 1/2 in.)	2 8 per foot run
Do. ramped	5/- do.
Do. wreathed	9/- do.
Ends framed to newels	18/- do.
Joints and handrail screws	5/- each

FIXING ONLY IRONMONGERY—

	To deal	To deal
Barrel bolts	1 2	1 8 each
Flush bolts	2 7	3 5 do.
Sash fasteners	1 8	2 2 do.
Rim locks and furniture	3 5	4 8 do.
Mortice locks and do.	6 8	10 3 do.
Cupboard locks	2 1	2 7 do.
Casement fasteners	1 8	2 2 do.
Do. stays	1 8	2 2 do.
Grip handles	1 6	1 8 do.
Spring catches	1 8	2 2 do.
Cabin hooks	1 4	1 8 do.
Floor springs including oil	39/-	48/- do.
Overhead springs	8 6	10 3 do.
Springhinges	7 9	9 4 do.

SMITH AND FOUNDER

	Per cwt.
Basis framed steel joists and hoist and fix	47 6
Do. but in compound girders	50 6
Do. but in stanchions	58/-
Trusses	66/-
Additional cost per cwt. over basic sections for rolled steel joists of the following sections—	
9 in. x 7 in.	3 1/2 d. per cwt.
6 in. x 3 in.	3 1/2 d. per cwt.
10 in. x 8 in.	4 1/2 d. per cwt.
12 in. x 8 in.	4 1/2 d. per cwt.
14 in. x 8 in.	4 1/2 d. per cwt.
16 in. x 8 in.	4 1/2 d. per cwt.
18 in. x 8 in.	4 1/2 d. per cwt.
20 in. x 6 in.	4 1/2 d. per cwt.
20 in. x 7 in.	4 1/2 d. per cwt.
5 in. x 2 1/2 in.	10 d. do.
4 in. x 3 in.	1 1/2 d. do.
3 in. x 3 in.	1 1/4 d. per cwt.
3 in. x 1 1/2 in.	4 1/2 in. x 1 1/2 in.
Bolts and nuts, fitted	90/- do.
Forged straps	80/- do.
Wrot iron balustrade	100/- do.

RAINWATER GOODS—

	Per foot lineal
Round cast-iron pipe with socketted joints caulked with red lead and tow and fixing with pipe nails and gas barrel distance pieces to plugs in brickwork	2 in. 3 in. 4 in.
Extra for shoes	4/- 4 9 6/-
Do. junctions	5 5 7/-
Do. bends	4 3 5 4 6 9

CURRENT MEASURED RATES (Continued)

RAINWATER GUTTERS

	Per foot run—		
	4 in.	5 in.	6 in.
Half round cast-iron eaves gutters joined in red lead and bolted and fixed on iron brackets	2/2	2/6	3/6
Ogee do. All as last	2/6	3/-	3/10
Extra for stop ends	2/4	2/7	2/11
Do. angles or outlets	4/6	5/7	6/8

PLUMBER

	EXTERNAL—	Soakers	Flats	Flashings
	Milled lead 4 lb. and over, per Cwt. 136	207	220	
	Weld. Lead wedge.	Copper nail.	Bossed ends to rolls.	
	1/- ft. run. 9d ft. run.	6d ft. run.	2/- each.	

Per foot run.	1/2 in.	3/4 in.	1 in.	1 1/4 in.	1 1/2 in.	2 in.
Lead main	5/7	7/9	10/7	13/6	17/2	23/7
Lead service	4/11	6/8	8/11	11/-	12/6	18/2
Lead waste	3/4	4/8	6	8/9	10/4	13/-
Bends	each			1/6	2/6	6/9
Solder joints	6/7	8/2	9/9	11/6	13/10	18/5
Unions and joints	10/7	13/4	16/10	22/3	26/11	41/6
Stop valves and 2 do. do.	23/3	30/3	41	62/6	87/-	139/-
Rib tap and joint	16/1	22/3				
Ball valve and do. do.	28/6	37/6	50	80/-	117	197/-
Ferrule and joints				22/6	28/6	

COPPER TUBES (B.S. 659) fixed with brass screw on brackets—

	1/2 in.	3/4 in.	1 in.	1 1/4 in.	1 1/2 in.	2 in.
Tubes, per ft. run	2/1	2/5	3/6	4/-	4/8	6/11
Couplings, straight	2/8	3/4	5/-	6/7	8/6	12/-
Do. bends, each	5/6	6/8	9/6	13/-	20/-	27/6
Do. tees, each	6/2	7/3	10/9	14/9	20/1	29/-
Do. cistern, each	5/-	6/-	8/2	11/-	14/-	18/6
Stop cock, each	16/6	23/3	37/-	63/-	98/6	155/-

BLACK TUBING fixed with pipe brackets—

	1/2 in.	3/4 in.	1 in.	1 1/4 in.	1 1/2 in.	2 in.
Bends and fitting, screwing, cutting and jointing	2/5	2/10	3/9	4/9	5/10	8/1
Tees and do.	2/9	3/3	4/-	4/8	5/9	8/-
Union connectors and do.	4/-	4/10	6/6	7/9	9/4	12/-
Forming single set in tube	1/-	1/1	1/2	1/6	2/-	3/6
Add if tubing is galvanised, 30%						

Coated iron L.C.C. weight soil pipe and fixing with pipe nails and distance pieces to wall and joints caulked with molten lead (M)

	2 in.	4 in.
Extra only for bends and joint	9/-	14/- each
Do. junctions and joint	10/3	17/6 do.
Do. cleaning doors	9/9	10/6 do.
Domical wire guards	2/3	2/4 do.

PLASTERER—

	Yards super.	Narrow wall.	Sundries
	Wall.	Super.	feet lineal.
Lime and 1" Render and set	4/9	Increase	Quirk 2d.
Do. 1" Render float and set	6/-	in cost	
Do. 1" Skimming coat	3/-	up to 3" wide	Arris 3d.

	Do.	Do.	Do.
Do. 1" Render and set	5/8	Do.	Rounded
Do. 1" Render float and set	7/3	60%	edge 4d.

	Do.	Do.	Do.
Portland 1" Backing coat	3/9	Do.	Flush
Do. 1" Plain face	6/3	6" to 12"	bead 1/3

	Do.	Do.	Do.
Do. 1" Screed	3/9	3/1	Mouldings
Do. 1" Screed	4/8	4/-	per inch 4d.

	Do.	Do.	Do.
Keenes 1" Skimming coat	4/4		Jointing new to old plastering 3d.

	Do.	Do.	Do.
Plaster board and scrim	4/9		
Metal lathing 1/2" x 24 gauge	3/3		

	Do.	Do.	Do.
Dubbing up to 1" thick	1/-		
1/2" x 6" White or cream glazed wall tiling and setting on prepared screed			31/- yard super.
Rounded edge to do. 3 1/2 ft. run; angles for same 3 1/2 ft. each			
Cutting and fitting tiles around pipes, clips, etc. 9d each			

POLISHING

	Foot super	Foot run
NEW WORK—		
Staining, bodying-in and French Polishing	2/-	
Do. on sashwork		1/3
Staining and wax polishing on hardwood	9d.	
Do. on sashwork		6d.

	Foot super	Foot run
OLD WORK—		
Cleaning down old work and repolishing	10d.	
Stripping, preparing and repolishing	2/3	
Do. on sashwork		1/6

INTERNAL PAINTING

With white lead base in common colours, with brushes.
Knot stop and prime once for each extra coat

	prime	once	twice	super
ON WOOD—				
General surfaces	2/-	3/7	5/2	1/4 Per Yard.
Running lengths not exceeding 3" wide	3d.	5/4d.	7/4d.	2d. Yard run
Do. 3" to 6" wide	4 1/2d.	7 1/2d.	10 1/2d.	2 1/2d. do.
Do. 6" to 9" wide	6 1/2d.	11 1/2d.	14	4d. do.
Do. 9" to 12" wide	8 1/2d.	12 1/2d.	15 1/2d.	5 1/2d. do.
Sash square each side	4/1	6/10	9/8	2/6 per dozen
Do. in large squares	5/11	9/10	13/9	3/3 do.
Opening edges	6d.	1/-	1/6	6d. each
Casement frames each side	4d.	7d.	10d.	2 1/2d. Yard run
Mullions or transoms, do.	5 1/2d.	9 1/2d.	11/1	3 1/2d. do.

	One coat	Two coats	Three coats
ON PLASTER—			
Paint on surfaces	1/10	3/5	4/11 Per Yd. sup.
Do. on mouldings	2/1	4/-	5/8 do.
Do. on enrichment	3/7	6/9	9/7 do.

ON STEEL—

	1/7	2/11	4/3
Paint on structural steel	2/7	4/10	7/1 do.
Do. on members of roof trusses			
Do. on metal windows measured over all on both sides, divided into squares	2/6	4/3	6/2 do.
Do. divided into large squares	2/2	3/7	4/11 do.
Do. divided into extra large squares	1/9	3/-	4/2 do.
Do. on opening edges	8d.	1/2	1/8 each
Do. on rain water pipe	6d.	1/-	1/5 Yard run
Do. on do. gutter	10d.	1/8	2/5 do.
Do. on small pipe	2 1/2d.	4 1/2d.	6 1/2d. do.

GLAZING (To New Work)

Polished Plate Glass, ordinary substance (about 1/16 in.), glazing quality, in the following sizes, glazed complete, in quantities exceeding 100 feet superficial—

	Per foot super
In plates not exceeding 2 feet super in each	3/8
Do. 3 feet	4/-
Do. 5 feet	4/2
Do. 45 feet	4/9
Do. 100 feet	5/5

Add extra price for glazing with screw beads or clips 3d. per foot super
Do. if glazing bedded in washleather or velvet .. 6d. per foot run.

SHEET GLASS glazed complete (100 feet super or more), foot super

	24 oz.	26 oz.	32 oz.
in new work—	1 1/4	1/6	1 8/11

Ordinary glazing quality (average)
Sundry glass and glazing all as last described to wood—

	1/6 per foot super
1/2 in. Hammered	
Double cathedral rolled	
Rimpled	
Waterwite	
1/2 in. Arctic	
Majestic	
Flemish	
Pinhead Morocco	
Prismatic	2/2 do.
1/2 in. roughcast	1/7 do.
1/2 in. wired do.	1/9 do.
1/2 in. Georgian wired do.	1/9 1/2 do.
Wired Arctic	2/8 1/2 do.

Add for metal casements or frames glazed with screw beads 2 1/2d. do.
Extra for do. with quick drying-putty 1 1/2d. do.
Copper clips .. 4d. each. Lead or zinc clips .. 3d. each

PAINTER AND DECORATOR

DISTEMPING—In common colours, put on with brushes—
ON PREPARED SURFACE. 1 coat 2 coats Add if required for (finish) (undercoat) Sealing Stipp-

	6d.	11d.	5d.	2d.
Ordinary distemper on flat surface of plaster				
Washable do. on do. of plaster	8 1/2d.	1/3	5d.	2d.
Add if in margins, narrow widths or panels	30%	30%	20%	50%
Add if on mouldings	50%	50%	45%	-
Add if on enrichments	160%	160%	115%	-

PAPERHANGING

	Per piece—	Lining	Pattern
Hanging only—			
On walls		3/-	3/6
On Stairs		4/3	5/3
On ceilings		4	4/6

NEWS of the BUILDING INDUSTRY



HAIL

AND

FAREWELL

The studies of expression speak for themselves. Left, the new President of the L.M.B.A., Mr. Dudley E. Cox, listens seriously. Right, past President Mr. Richard Costain listens cheerfully. The occasion was the L.M.B.A. luncheon on January 18, which preceded the annual general meeting. Mr. Richard Stokes, Minister of Works, spoke at the luncheon.

During his speech the Minister of Works paid tribute to the work of Mr. Bevan. "The house building programme," said Mr. Stokes, "must be kept inviolate. We have had a programme and stuck to it and that has never been done before." Referring to the recruitment of apprentices which was "woefully behind", the Minister said it was up to the trade to take on the job of getting more and better people into the trade. Dealing with materials, Mr. Stokes said that there would not be less than 9.11 million tons of cement in 1951, bricks would be up by 20%, and timber depended on availability of shipping. "Steel," said the Minister, "is there if you know how to get it, but make sure it doesn't get into the wrong hands."

At the annual general meeting the following officers were elected for 1951: senior vice-president, Mr. D. E. Woodbine Parish; vice-presidents Mr. A. W. Yeomans and Mr. Gerald A. Hill; Hon. Treasurer, Mr. Nigel Hannen.

INTEREST

REPORTS OF A STATEMENT made by Mr. Barry Kay (the Midland Regional Controller of the Board of Trade) may have suggested that the Government is considering cancelling the British Industries Fair.

The Board of Trade states that Mr. Barry Kay was merely dealing with the question whether firms at present proposing to exhibit at the B.I.F. should continue to do so if their products were affected by the restrictions on the use of non-ferrous metals. He appealed to such firms not to cancel their exhibits forthwith but to await a Government announcement on arrangements for supplies of these metals for export purposes. There is no intention of cancelling the British Industries Fair which retains its importance in view of the continuing need to maintain United Kingdom exports.

APPLICATIONS are now invited for the Welfare Fund Scholarships of the Building Apprenticeship and Training Council. Scholarships will be tenable for three years at a University or Technical College offering a degree or higher diploma course in building science. Candidates for university courses must be at least 17 years old (16 for diploma courses) on 31st March, 1951.

Application must be made through, and supported by, the recommendation of the Principal or Head Teacher of the Educational Institution at which the candidate is attending or has attended.

Notes for the Guidance of Principals and Head Teachers nominating candidates, Forms of Recommendation, and leaflets setting out the arrangements fully, may be obtained from: The Secretary, Building Apprenticeship and Training Council, Lambeth Bridge House, Albert Embankment, London, S.E.1. The closing date for receipt of recommendations is 31st March.

FIVE

WEST RIDING COUNTY COUNCIL envisage little expansion of Skipton taking place in the years ahead. Skipton Urban Council, however, visualize the town growing to a population of 25,000 compared with the present 13,340. Complementary to the broad development plan the County is required to submit detailed town maps, to the Minister of Town and Country Planning. Skipton is excluded but Mr. K. H. Robinson, Skipton Engineer and Surveyor, and a member of the Country Towns Committee of the Town and Country Planning Association, has stressed the need for the immediate zoning of land to avoid the delays and frustration which now appear to greet every new project. A plan is urged by Mr. Robinson for the redevelopment of the central area to ensure that the land on either side of High Street, now tending in places to become derelict, is efficiently utilized. The Council agree that no solution of these or other long term requirements appears possible until some redevelopment plan has been prepared.

—CORRESPONDENCE—

To the Editor of A. & B.N.

Sir,—The excellent article No. 19 by A. Foreman on the design of larders omits the mention of a "cold shelf."

The shelf at 2 ft. 6 in. above the floor for the storage of the larger articles can usefully be constructed of concrete rendered in smooth trowelled cement or tiled or again marble or slate, salvaged from old washstands and fireplace mantelpieces, has proved most successful for this use.

I am, etc.,

M. R. FLETCHER, L.R.I.B.A.

* It has recently been reported that ships intended for importing timber have been switched to bring in coal.
—To Newcastle 1—Ed.

BUILDING TEACHERS met recently at the Heriot-Watt College, Edinburgh.

The meeting was convened by Mr. N. C. Sidwell, B.Sc., A.R.I.C.S., Head of the Building Department, Heriot-Watt College, and was attended by representatives of technical colleges and schools of building.

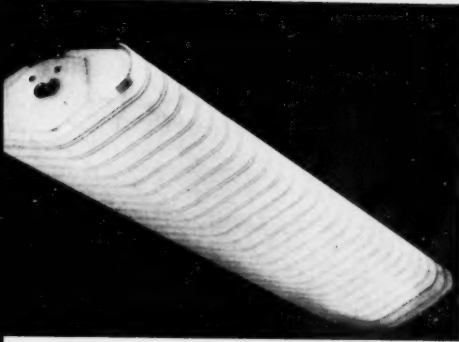
The desirability of forming an association whereby members of the building industry, building teachers and others interested could meet and express their views freely with regard to Building education, etc. It was decided unanimously to proceed. A draft constitution was laid down for the new body which is to be known provisionally as the Scottish Association for Building Education. Any person interested is invited to get in touch with Mr. J. Campbell, D.C.M., M.M., A.R.I.B.A., (Hon. Secretary,) Heriot-Watt College, Edinburgh, or Mr. E. Morris, A.R.T.C., (Hon. Assistant Secretary,) The Royal Technical College, Glasgow.

STEEL must be forthcoming without having to resort to unorthodox methods, for the industry has always strongly deprecated anything in the nature of black market activities. This was stated by Mr. Robert O. Lloyd, President of the N.F.B.I.E., at Cambridge on January 24.

At the L.M.B.A. luncheon on January 18 the Minister of Works said of steel: "If you don't know how to get it, learn how to scrounge, but do not quote me."

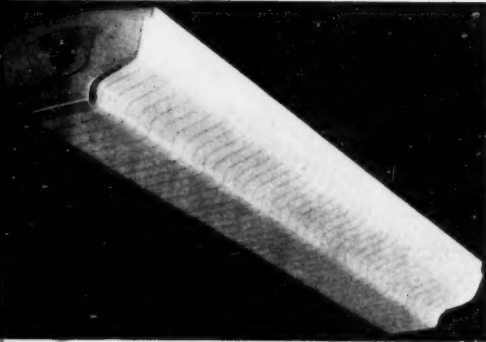
THREE MINISTRY OF WORKS FILMS

—"The Task Before the Building Industry," "Care and Maintenance of Plant" and "Watch Your Step"—a film on safety regulations—are being shown in fifteen towns in England and Wales during February. Admission to the shows will be free to builders and members of the associated professions. Programme details may be had from M.O.W. Lambeth Bridge House, S.E.1.



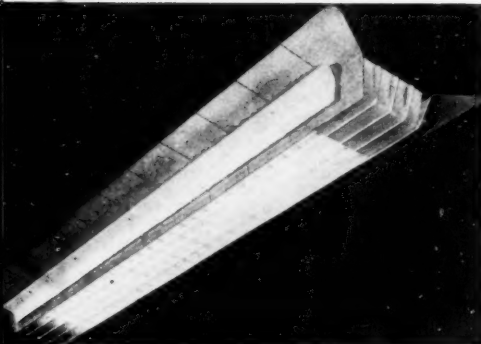
LIGHTING B1/4

One of a recently developed range of fluorescent light fittings. Other recent fittings designed and produced by the same firm are shown in B1/5, B1/6, B1/7. This model has an easily removable "Perspex" diffuser, concealing twin 30-watt lamps. Overall length is 3ft. 5in. Weight with control gear is 13½lb.



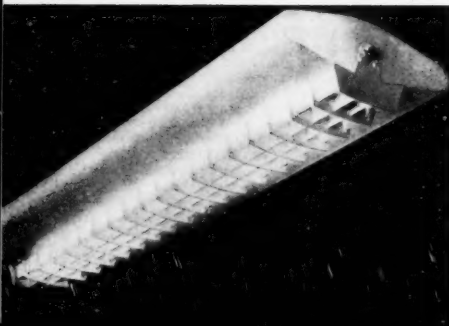
LIGHTING B1/5

This is a variation of the model shown in B1/4 above. Overall length is 3ft. 5in. Weight with control gear is 13½lb. The basic channel is as for B1/4 taking twin 30-watt lamps.



LIGHTING B1/6

This is a larger fitting than those shown in B1/4 and B1/5. Overall length is 6ft. Weight with control gear is 42lb. This model takes twin 80-watt lamps. The wings are of aluminium veneered with sycamore. The aluminium louvre is stove enamelled white. The control gear is housed in a strong steel channel.



LIGHTING B1/7

At 14½lb. this model weighs a fraction more than B1/4 and B1/5. Otherwise the basic design is the same, namely twin 30-watt lamps with an overall length of 3ft. 5in. The diffuser is of opal "Perspex".

MOSAICS

The names and addresses of manufacturers of any item illustrated in MOSAICS, together with more detailed information relating to their products—including price and availability—will be forwarded to readers on request.

Letters should quote the serial number and be addressed to :

The Associate Editor,
The Architect and Building News,
Dorset House,
Stamford Street, S.E.1.

Please mark the envelope MOSAICS.

M.O.W. LECTURES.

February 5

Economy in Traditional House Building.
7.30 p.m. at the Canteen of Messrs. Walter Lawrence & Sons Ltd., Joinery Works, Sawbridgeworth, near BISHOPS STORTFORD.

Good Practice in Plumbing.
7.0 p.m. at the Technical Institute, EASTBOURNE.

February 6

Timber in Building—Factors Affecting Its Behaviour and Durability.
7.0 p.m. at The Star and Garter Hotel, ANDOVER.

Introduction to Site Costing for Builders.
7.30 p.m. at the Physics Lecture Theatre, Royal Fort, BRISTOL. 8. Some Mechanical Aids Developed for Building.

7.15 p.m. at the City Technical College, Byrom Street, LIVERPOOL.

February 7

Introduction to Site Costing for Builders.
7.30 p.m. at the Town Hall, DEVIZES.

Essentials of Good Concreting.
7.15 p.m. at Du-Jon Restaurant, Market Place, PETERBOROUGH.

Mining Subsidence.
7.0 p.m. at Y.M.C.A., Connaught Hall, Blackett Street, NEWCASTLE-ON-TYNE.

Building for the Farmer.
7.15 p.m. at Lecture Hall, the Technical College, Lord Street, KEIGHLEY.

Applications of Zinc in Building.
7.15 p.m. at Trinity Hall, Trinity Street, WORCESTER.

Techniques and Devices for Improving Bricklaying Output.
7.30 p.m. at the City Museum and Art Gallery, Tavistock Road, PLYMOUTH.

The Building (Safety Health and Welfare) Regulations, 1948.
7.15 p.m. at the Volunteer Hall, GALASHIELLS.

February 8

Good Practice in Plumbing.
7.0 p.m. at Twickenham Technical College, Egerton Road, TWICKENHAM.

Good Practice in Domestic Drainage.
7.15 p.m. at Mining and Technical College, Church Street, BARNSELY.

Techniques and Devices for Improving Bricklaying Output.
7.30 p.m. at the Municipal Hall, TAUNTON.

Essentials of Good Concreting.
7.15 p.m. at Gas Showrooms, Osborne Street, GRIMSBY.

February 12

Powered Hand Tools.
7.15 p.m. at the Adelphi Hotel, ST. LEONARDS-ON-SEA.

GOOD, BAD OR INDIFFERENT?

No. 21—By A. FOREMAN

Pattern Staining

AT the present time there is a tendency to defer building repairs and re-decoration as long as possible, so that many of our buildings are dirtier than they were before the war. Because of this delay in re-decoration one of our old troubles has become even more obvious—that is, the collection of dirt unevenly on ceilings and walls, which is called pattern staining if the irregularity follows the pattern of the underlying structure. Pattern staining, while giving an undesirable appearance which re-decoration eliminates, at least temporarily, does not indicate any permanent structural damage.

The cause of this irregularity in the accumulation of dirt is that dirt will collect on any surface, such as a ceiling or a wall, that is colder than the air adjacent to it, and the rate of deposition depends on the difference in temperature. If the general temperature in a room is kept at about the same level, this difference in temperature depends on the temperature of the air itself and on the rate of heat loss through the surface. If the heating is by means of some form of convection appliance, such as a hot water radiator, this will raise the temperature of the air, especially near the appliance, more than a radiant appliance such as a gas fire. The rate of heat loss largely depends on the thermal conductivity of the structure behind the surface; thus a well insulated area is less likely to accumulate dirt than an area with a conductive backing.

A common example is that of a plaster ceiling with wood laths fixed to wood joists; here the greatest insulation is provided by the joists, a lesser amount by the laths and a very little by the plaster and there will be a similar, but reversed,

variation in the amount of dirt—the plaster under the joists being the cleanest. If, however, the ceiling is fixed to the underside of steel or concrete beams the heat losses through these will be very different from through the plaster which is not so backed and therefore the beams will cause dark areas.

The Stationery Office has recently published a very good booklet on this subject, *National Building Studies Special Report No. 6, "Pattern Staining in Buildings"*, price 6d., which explains all this very clearly and includes some photographs and details of typical cases. In this report, it is suggested that the trouble can be prevented, or at least reduced, by matching up the conductivity of the various parts, e.g. by fixing additional insulation between the joists or under the beams in the cases mentioned above, by increasing the total insulating value of the structure as a whole, or by using thicker plaster over the whole surface. Anyone interested in this subject should certainly read this booklet.

There are however some other points which are not referred to in the booklet. For instance, even with a well designed structure, pattern staining can occur if large-headed nails are used to fix insulating boards. I have seen many jobs where there are rows and rows of grey dots, each about $\frac{1}{2}$ in. diameter due to the extra heat conducted by the nails. I referred to this in No. 6 of these Notes and recommended the use of lost-head nails or panel pins with which the dark spots will be so small as to be unnoticeable. On another job a damaged plaster ceiling had been repaired using some insulating board at one end of the room so that now part of the ceiling is quite a different colour from the remainder because the insulating value of the board is

so much greater than that of plaster even where, as in this case, the plaster is thick lime plaster. This is one of those instances where patching-up needs to be very carefully done if it is not to be a false economy.

In another house a cold water feed pipe was very near the surface of a kitchen wall so that there was a clearly defined stripe of dirt up the wall following the pipe. The only remedy at this stage was to re-paint the kitchen using a gloss paint which could be wiped down more easily than the distemper used. The prevention of course would have been to have set the pipe in a proper chase with an adequate cover over it.

Most people recognise that the hot air rising from a radiator can cause an excessive accumulation of dirt on the wall above it. But I still see plenty of radiators being fitted without proper baffles over them to direct the air away from the wall. Another frequent source of trouble—I think "annoyance" might be a better word—is due to the heated air from heated cupboards leaking out between the framing of the cupboard and the wall or ceiling adjoining. What usually happens is that the framing does not fit sufficiently closely against the wall, also shrinkage takes place, leaving gaps through which the air streams out, leaving fan-shaped streaks along the wall. These junctions must be made air-tight and proper steps taken to ventilate the cupboards. Similar troubles arise from the suspension of hot water pipes a few inches below the ceiling and this is particularly difficult as where the valves occur the insulation is, of necessity, omitted round each valve causing dirty patches on the ceiling. These difficulties can only be overcome by very careful placing of pipe runs and the avoidance of uncovered portions as far as possible.

PRESTRESSED CONCRETE: RETROSPECT AND PROSPECT

No. 1 — By Rolt Hammond, A.C.G.I., A.M.I.C.E.

In this series of articles the author explains the main advantages of prestressed concrete and has quoted only a very few examples of many works which have been carried out by this method. He wishes to emphasize that prestressed concrete is a scientific material, that it must be carried out by specialists who know how to get the best out of it, and that it is not the panacea for all structural problems. Rather is it a valuable complementary material to conventional reinforced and mass concrete structures, and in certain cases it has outstanding advantages which cannot be obtained by any other method.

Recent developments which have taken place in the technique of prestressed concrete should serve as a reminder that very great opportunities exist for entirely new fields of architectural expression. All kinds of structures can now be constructed with a grace and lightness not attainable in conventional reinforced concrete.

The beginnings of prestressed concrete date back to 1886. But Freyssinet, may justly be called the father of prestressed concrete. Few civil engineers live to see the results of their research so amply justified by so many successful works. Pioneers generally have a hard struggle to convince richards and even to win over opponents to their way of thinking. Freyssinet has been successful because he has always employed sound basic principles in his work, and has that practical outlook so sadly lacking in the academic type of engineer. The academic engineer is all too prevalent these days, and his influence on engineering thought is frequently out of all proportion to the real practical value of his work.

THE one major defect of conventional reinforced concrete is its inability to sustain high tensile stress. The main objective of prestressed concrete is to overcome this defect in a practical and economical manner. By prestressing, a superimposed stress (of opposite sign to

those fibres subjected to tensile stress) is imparted and by this means a concrete member can be loaded up to the point where this superimposed stress is counter-balanced. Until this state of affairs is reached, there are no tensile stresses in the concrete. Moreover, the precise value of the

superimposed stress put into the member is known.

In prestressing, steel wire with a high ultimate tensile strength is used and a high strain in the member is obtained. Thus, a mild steel rod of 66 feet in length, when embedded in concrete, will stretch about half an inch if loaded to 16,000 lb. per sq. in.; on the other hand, high tensile steel wire, if loaded to 120,000 lbs. per sq. in. will stretch about $3\frac{1}{2}$ inches. A concrete member of 66 feet length will shrink about a quarter of an inch after prestressing is established. But when a few months have elapsed at least another quarter of an inch is lost because of the creep of the concrete. The vitally important point to bear in mind is that by employing cold drawn high tensile steel wire as reinforcement, a permanently prestressed member can be made, because now the extensions induced in the wires are far

greater than the losses due to creep and shrinkage. For example, in a length of 66 feet the loss due to these causes is only about 12½ per cent.

Professor Gustave Magnel, an eminent authority on this new technique, has given an instructive practical example of the application of prestressed concrete to bridge construction. He assumed a span of 66 feet to carry a superimposed load of 420 lb. per sq. ft., and he first considered a conventional reinforced concrete structure to withstand this load, using a stress of 17,600 lb. per sq. in. in the mild steel reinforcement and a compressive stress of 1,500 lbs. per sq. in. in the concrete (a stress which, by the way, is far too great). On this basis he will require 11.4 sq. in. of steel per foot width of beam which represents some 2.3 per cent. This amounts to a single layer of reinforcement of 1½ inch diameter bars at 2 inch centres, and such a design can hardly be termed practical, although even in this obviously absurd example the overall depth will have to be 3 ft. 7 in.

From the practical construction angle, such a structure would have to be built with a very wet concrete, so that the latter could be placed around this congested mass of steel bars. The resulting loss in strength and increase in shrinkage hardly require emphasis. The important feature to bring out here is that with prestressed concrete the placing of the concrete is a relatively simple matter since the sections are not obstructed by a veritable forest of steel bars. This means that a very low water/cement ratio can be used, thereby obtaining concrete of the necessary high strength.

In this particular example it is assumed that the bridge is on a site where the abutments are of solid rock, a very fortunate state of affairs giving ideal conditions for a prestressed concrete structure.

Between these abutments we will erect a soffit shutter upon which we shall cast an unreinforced concrete slab 2 ft. 8 in. thick. One end will be cast tight against the abutment. At the other end there will be a space of about 2 feet. When the concrete

has hardened sufficiently, an hydraulic jack will be erected in this space. The jack is so arranged that its point of application on the end of the beam is 2 in. above the lowest fibre and is capable of applying a load of 119 tons. When this force is applied, the unreinforced slab will tend to be bent upwards, or off the shuttering of the soffit.

Now it is clear that when this occurs the slab will be subjected to two forces, namely: a longitudinal compression due to the action of the jack and the vertical load due to the weight of the slab itself. If the stresses due to the superimposed load are now calculated, we find that we get a stress of 1,275 lbs. per sq. in. in tension or compression in the bottom and top fibres respectively.

In this ideal bridge, the overall depth has been reduced by 11 in., no steel has been used, and the maximum stress in the concrete has not exceeded that of the reinforced concrete design, or 1,500 lbs. per sq. in. (To be continued)

DOMESTIC SOLID FUEL APPLIANCES—No. 4.

By John Pinckheard, A.R.I.B.A.

COOKERS AND COMBINATION GRATES

SOLID fuel for cooking, which in pre-war years had been losing ground to gas and electricity, has, since the war enjoyed some revival in popularity due to the introduction of improved types of cookers and combination grates.

Cookers. Cookers of post-war design are invariably of free-standing type and consist essentially of an enclosed fire which supplies heat to a hot plate, one or more ovens and generally a back boiler for domestic hot water supply. There are two main categories of free standing cookers, heat storage cookers and (what may be called for want of a more precise definition) insulated cookers. Both types are continuous burning.

Heat storage cookers of very high efficiency were of course well-known before the war; their comparatively high initial cost however has tended to restrict them to larger houses. In cookers of this type the heat is stored in heavy metal castings, which are exceptionally well insulated to prevent heat loss, and is transmitted by conduction to the hot plate and ovens. The rate of combustion is controlled thermostatically and hot plate and ovens are maintained continuously at the requisite cooking temperatures. A back boiler may be incorporated. Heat storage cookers require smokeless fuel—anthracite, coke or other carbonized fuel. Fuel consumption is appreciably lower than an ordinary insulated cooker of comparable size and at least one firm guarantee that their cookers will not exceed a certain maximum annual fuel consumption.

The continuous burning insulated cooker as distinct from the heat storage cooker is largely a post-war development and fills the need for an appliance which is reasonably cheap in first cost and economical in operation. The continuous burning fire eliminates the daily labour of fire-lighting, it ensures that the hot plate is ready for preparing early breakfasts and that the ovens can quickly be brought to the desired cooking temperature and, where a boiler is incorporated, water heating is

spread over a longer period and does not interfere with cooking requirements. Oven and hot-plate temperatures are usually controlled by means of manually operated dampers. Insulation is not so heavy as for the heat-storage cooker but the heat losses from the cooker provide a useful measure of space heating in the kitchen.

Ministry of Fuel and Power minimum performance standards include the following stipulations: Under banked conditions of firing the cooker shall be capable of remaining alight unattended for at least 10 hours during which time the fuel consumption shall not exceed 10 lbs. for any of the fuels claimed by the appliance manufacturers to be suitable. Under prescribed test conditions and following the 10 hour banking period the cooker shall be capable of heating two pints of water through a temperature rise of 140°F. within 20 mins. and at other times within 10 minutes. Boiler output and oven dimensions shall be as prescribed in British Standard 1252:1945, "Solid Fuel Cookers and Combination Grates". The prescribed boiler output shall be achieved with the consumption of not more than 36 lbs. of fuel over a 24 hour period.

The British Standard includes the following recommendations: the hot plate should have an area of at least one sq. ft. Where one oven only is provided this should have a minimum capacity of 1.5 cubic feet, and where two are provided each should have a least capacity of one cubic foot and be not less than 12 inches wide and eight inches high. The boiler output where a boiler is fitted should be not less than 70,000 B.Th.U's per 24 hours. With a compact and well insulated hot water system a back boiler of this size should provide the standards recommended in the Egerton Report, namely 250 gallons weekly at 140°F.

Insulated cookers are mostly designed to operate on a wider range of fuels than heat storage cookers and including bituminous coal. Fuel consumption varies with the type and size of cooker but generally should be between 1½ and 1¾ cwt. each week. A typical model is illustrated in Fig. 1.

The installation of cookers does not

present very serious problems as present day appliances are all free-standing and require only flue and boiler connections. Where the cooker replaces an old-fashioned range it will usually be found that the soffit of the fireplace opening is sealed with a register plate and in such cases the flue pipe from the cooker should be carried well up through the register plate and terminate near the throat of the brick flue. In new buildings the cooker recess is usually spanned by a concrete lintel block which should be suitably holed to receive the flue pipe. Suitably placed soot doors should be provided to facilitate chimney sweeping, one arrangement being as shown in Fig. 2. Flues serving bituminous coal burning appliances need more frequent sweeping than for cookers operating on smokeless fuel. In the case of heat storage cookers, which have a very slow rate of burning it is sometimes recommended that the flue gases be diluted by introducing air from the room into the floor and a grille for this purpose may be provided at a point above the junction of the flue pipe with the brick flue. Dilution is desirable in order to prevent condensation of the gases in the chimney which may in time result in serious damage to the brickwork. In one heat storage cooker the flue gases are diluted by the introduction of warmed air into the flue pipe.

Combination Grates. A "combination grate" consists of an open fire or, more rarely, an openable stove in combination with a hot plate and oven and fulfils the dual function of supplying space heating to one room and also providing cooking facilities. A back boiler for the supply of domestic hot water is almost invariably also included. Post-war combination grates have been developed around the improved open fire to which reference has been made previously (see *A* and *BN* Dec. 29, 1950) and are for this reason alone more efficient than most pre-war models.

There are three types of combination grate: "side-oven", (Fig. 3), "oven-over-fire" (Fig. 4) and "back-to-back". The two former types are most suitable for "kitchen-living room" and the latter for "dining kitchen and separate living room"



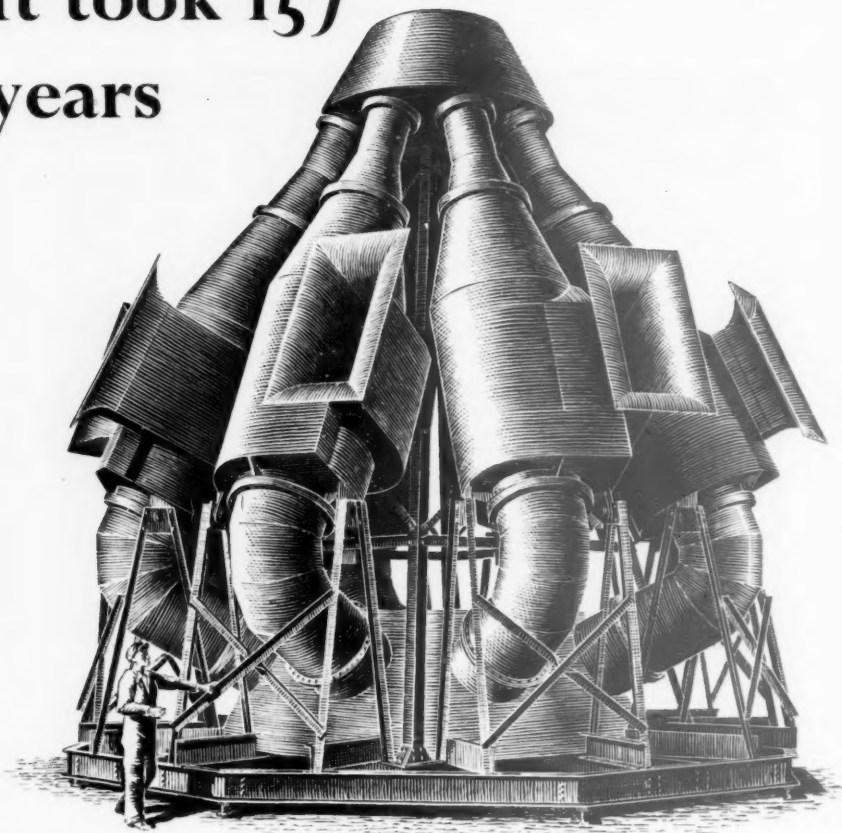
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Fig. 1. A free-standing insulated cooker of post-war design by the Eagle Range and Foundry Co.

Photo by courtesy of the Women's Advisory Council on Solid Fuel.

plans, though various other arrangements are possible. Combination grates are generally more popular in the North of England where because of the longer heating season an open fire is welcome for the greater part of the year. In this connection it should be noted that with the present-day closable open fire it is possible to reduce the emission of unwanted radiant heat during the warm weather, so that all the year round cooking and water heating are possible without undue over-heating of the living room. Weekly fuel consumption should be of the order of $1\frac{1}{2}$ to 2 cwt. Overall thermal efficiency under operating conditions may be as high as 50% of which about half is accounted for by space heating.

Ministry of Fuel and Power minimum

performance standards in respect of over-night burning, boiling time, oven sizes boiler output and fuel consumption are the same as for cookers. There is an additional requirement that when used as an open fire for space heating only the space heating output shall be not less than 6,000 B.Th. U's per hour.

The British Standard recommendations in regard to performance are also the same as those quoted above for cookers. The British Standard also gives dimensions for appliances and brick openings. Minimum dimensions for brick openings for "side-oven" grates are: height 48 inch, width 40½ inch and depth 18 inch; and for "oven-



FREE-STANDING COOKER WITH TOP FLUE OUTLET
INSTALLED AGAINST A WALL

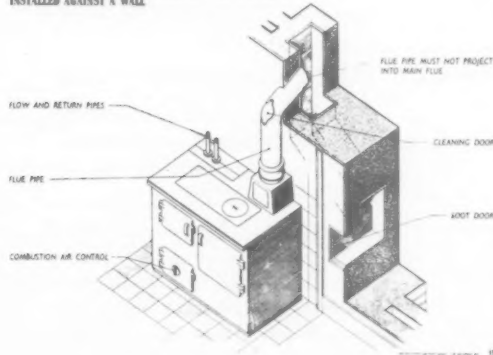


Fig. 2. Sectional view illustrating the installation of a free-standing cooker. Note the provision of access for chimney sweeping. Fig. 3. A typical side-oven combination grate. Courtesy of the Coal Utilisation Joint Council.

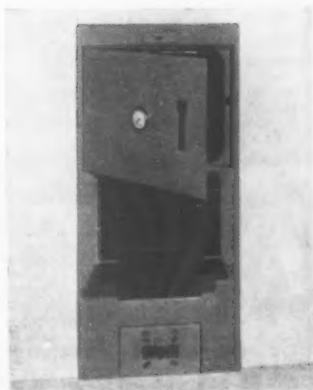


Fig. 4. An "oven-over fire" combination grate by the Eagle Range and Foundry Co.

Photo by courtesy of the Women's Advisory Council on Solid Fuel.

over-fire" grates: height 48 inch, width 22 inch and depth 14 inch.

Back-to-back grates normally require an 18 inch wall thickness and the lintel height varies as between the kitchen and living room side. One post-war back-to-back grate however shown in Fig. 5, is designed for building in a $4\frac{1}{2}$ inch wall and has a side flue outlet for connection to a brick flue, an arrangement which greatly simplifies installation.

Fig. 5. A "back-to-back" combination grate by Allied Ironfounders designed for installation in a $4\frac{1}{2}$ inch wall dividing kitchen and living room. The side flue outlet is visible on the right.

Photo by courtesy of the Women's Advisory Council on Solid Fuel.

SIDE-OVEN COMBINATION GRATE

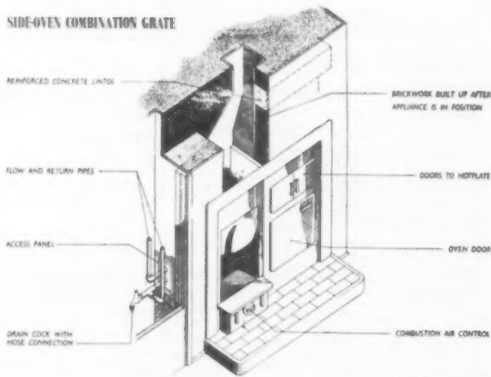


TABLE 1

Sectional Area Square Inches	Lineal Feet per Standard	LINEAL FEET														
		1	2	3	4	5	6	7	8	9	10	20	30	40	50	
		STANDARDS														
1	23,760	-00004	-00008	-00012	-00016	-00021	-00025	-00029	-00033	-00037	-00042	-00084	-00126	-00168	-00210	
2	11,880	-00008	-00016	-00025	-00033	-00042	-00050	-00058	-00067	-00075	-00084	-00168	-00252	-00336	-00420	
3	7,920	-00012	-00025	-00037	-00050	-00063	-00075	-00088	-00101	-00113	-00126	-00252	-00376	-00505	-00631	
4	5,940	-00016	-00033	-00050	-00067	-00084	-00101	-00117	-00134	-00151	-00168	-00336	-00505	-00673	-00841	
5	4,752	-00021	-00042	-00063	-00083	-00105	-00126	-00154	-00171	-00189	-00210	-00420	-00631	-00841	-01052	
6	3,960	-00025	-00050	-00075	-00101	-00126	-00151	-00176	-00202	-00227	-00252	-00505	-00757	-01010	-01262	
7	3,394.28	-00029	-00058	-00088	-00117	-00147	-00176	-00206	-00235	-00265	-00294	-00589	-00883	-01178	-01473	
8	2,970	-00033	-00067	-00101	-00134	-00168	-00202	-00235	-00269	-00303	-00336	-00673	-01010	-01346	-01683	
9	2,640	-00037	-00073	-00110	-00147	-00184	-00220	-00257	-00294	-00331	-00368	-00736	-01104	-01473	-01841	
10	2,376	-00042	-00084	-00126	-00168	-00210	-00252	-00294	-00336	-00378	-00420	-00841	-01262	-01683	-02104	
11	2,160	-00046	-00092	-00138	-00185	-00231	-00277	-00324	-00370	-00416	-00462	-00925	-01388	-01851	-02314	
12	1,980	-00050	-00101	-00151	-00202	-00252	-00303	-00353	-00404	-00454	-00505	-01010	-01515	-02020	-02525	
13	1,827.69	-00054	-00109	-00164	-00218	-00273	-00328	-00382	-00437	-00492	-00547	-01094	-01641	-02188	-02735	
14	1,697.14	-00058	-00117	-00176	-00235	-00294	-00353	-00412	-00471	-00530	-00589	-01178	-01767	-02357	-02946	
15	1,584	-00063	-00126	-00189	-00252	-00315	-00378	-00441	-00505	-00568	-00631	-01262	-01893	-02525	-03156	
16	1,485	-00067	-00134	-00202	-00269	-00336	-00404	-00471	-00538	-00606	-00673	-01346	-02020	-02693	-03367	
17	1,397.64	-00071	-00143	-00214	-00286	-00357	-00429	-00500	-00572	-00643	-00715	-01430	-02146	-02861	-03577	
X18	1,320	-00075	-00151	-00227	-00303	-00378	-00454	-00530	-00606	-00681	-00757	-01515	-02272	-03030	-03787	
19	1,250.52	-00079	-00159	-00239	-00319	-00399	-00479	-00559	-00639	-00719	-00799	-01599	-02399	-03198	-03995	
20	1,188	-00084	-00168	-00252	-00336	-00420	-00505	-00589	-00673	-00757	-00841	-01683	-02525	-03367	-04208	

TABLE 2

Depth in Inches	Super. Feet per Standard	SUPERFICIAL FEET														
		1	2	3	4	5	6	7	8	9	10	20	30	40	50	
		STANDARDS														
1	1,980	-00050	-00101	-00151	-00202	-00252	-00303	-00353	-00404	-00454	-00505	-01010	-01515	-02018	-02525	

EXPLANATORY NOTES

TABLE 1. To convert Timber of any Sectional Area and Length into Standards

EXAMPLE:— To convert 1117'-0" x 6" x 3" into Standards

6" x 3" = 18 square inches (see Line marked "X")

7'-0" = -00530 Standards

10'-0" = -07575 "

100'-0" = -75757 "

1,000'-0" = -75757 "

1,117'-0" = -84619 "

TABLE 2. To convert Superficial Feet of any Thickness into Standards

EXAMPLES:—(1) To convert 1,186 Superficial Feet 1" in Thickness into Standards.

6 Super Feet = -00303 Standards

80 " " = -04036 "

100 " " = -05050 "

1,000 " " = -50505 "

1,186 " " = -59894 "

(2) To Convert any quantity greater or less than 1" in Thickness Multiply Quantity given in Table by Thickness required.

TIMBER CONVERSION TABLES

On this page we reproduce, in part, a set of Timber Conversion Tables prepared by Mr. E. H. B. Norris, Borough Engineer's Dept., Bolton.

The tables show at a glance the decimal part of Standard of any length of Timber of any sectional area. The complete table includes lengths per Standard up to 1000 feet and sectional areas up to 36 square inches.

Notes below give basic data of contracts open under locality and authority which are in bold type. References indicate: (a) type of work, (b) address for application. Where no town is stated in the

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address it is the same as the locality given in the heading, (c) deposit, (d) last date for application, (e) last date and time for submission of tenders. Full details of contracts marked * are given in the advertisement section.

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BILLINGE & WINSTANLEY U.C. (a) Further 10 pairs of houses on Claremont site. (b) Council's Clerk, Council Offices, Main Street, Billinge, Nr. Wigan. (c) 2 Gns. (c) Feb. 16.

BISHOP'S STORTFORD U.C. (a) 16 houses and 16 bungalows on Apton Road site. (b) Engineer and Surveyor, The Council House. (c) 2 Gns. (c) Feb. 12.

CANTERBURY C.C. (a) 2 blocks of 4 and 5 pairs of Old People's Homes. (b) City Architect. (c) 2 Gns. (c) Feb. 15.

CANTERBURY C.C. (a) 2 blocks of 4 and 5 pairs of aged persons' homes at The Holt. (b) City Architect, Municipal Buildings. (c) 2 Gns. (c) Feb. 15.

CARLISLE C.C. (a) Extension to Carlisle Grammar School, comprising science laboratory with lecture rooms and minor alterations. (b) City Surveyor, 18 Fisher Street. (c) 2 Gns. (c) Feb. 9.

CARLTON U.C. (a) (Scheme 57) 28 flats in 7 blocks at Cross Street site. (Scheme 58) block of 4 flats at Simkin Avenue site. (b) Engineer and Surveyor, Council House, Burton Road. (c) 2 Gns. (c) Feb. 20.

CHADDERTON U.C. (a) 64 houses on Lower Bares Trees site. Contract No. 3. (b) Council's Architect, Town Hall. (c) 3 Gns. (c) Feb. 13.

CROYDON B.C. (a) Alterations and additions at old people's home at "Shirley," Pampisford Road. (b) Borough Engineer, Town Hall. (c) 2 Gns. (c) Feb. 20.

EAST RIDING C.C. (a) Completion of super-structure, excluding steelwork, of Hedon/Preston secondary school. (b) Johnson & Crabtree, 20 Priory Place, Doncaster. (c) 1 Gn. (c) Feb. 28.

ESSEX C.C. (a) 4 houses and 4 sets of farm buildings, Barnston Estate, near Dunmow. (b) County Land Agent, 69 Duke Street, Chelmsford. (c) Feb. 20.

FOLKESTONE B.C. (a) 6 blocks each of 4 flats, Biggins Wood site. 9 blocks each of 4 flats, Bridge Street. (b) Borough Engineer, Municipal Offices. (d) Feb. 5.

FOLKESTONE B.C. (a) 36 flats in nine blocks at Bridge Street site. (b) Borough Engineer, Municipal Offices, West Terrace. (c) 3 Gns. (d) Feb. 5.

FOLKESTONE B.C. (a) 24 flats in six blocks at Biggins Wood site. (b) Borough Engineer, Municipal Offices, West Terrace. (c) 3 Gns. (d) Feb. 5.

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GLOUCESTER R.C. (a) 16 houses with site works and sewage disposal works at Quedgley. (b) Messrs. Carus-Wilson & Demuth, The Cottage, Green Lane, Hardwicke, Glos. (d) Feb. 12.

GREAT YARMOUTH B.C. (a) Two-storey secondary technical school at Gorleston. (b) F. Jackson, Schools Architect, 15 Regent Street. (c) 2 Gns. (d) Feb. 5. (e) Mar. 2.

HARPENDEN U.C. (a) 18 houses on Batford (North) Estate. (b) Council's Clerk, Harpenden Hall. (c) 1 Gn. (e) Feb. 26.

HARTISMIERE R.C. (a) 6 houses at Stoke Ash; 6 at Stradbroke; 2 houses, 4 bungalows and 2 garages at Laxfield; terrace of 4 houses at Weybread. (b) Leslie Barefoot, The Thorfare, Ipswich. (c) 2 Gns each site. (e) Feb. 19.

HEREFORDSHIRE C.C. (a) First two sections of new school at Gateway Lane, Leominster. (b) Director of Education, County Offices, Hereford. (c) 2 Gns. (d) Feb. 7. Approx. cost £60,000.

HOVE B.C. (a) (Contract No. 1) 28 flats. (Contract No. 2) 24 flats. (Contract No. 3) 18 flats. St. Helen's Estate. (b) Borough Surveyor, Town Hall. (c) 3 Gns. each contract. (e) Feb. 21.

KENDAL B.C. (a) 46 dwellings on Hallgarth Estate. (b) Borough Engineer, Municipal Offices, Lowther Street. (c) 2 Gns. (e) Feb. 21.

LANCASHIRE C.C. (a) Prefabricated depot buildings at Whalley Depot, Saunderton Quarry Depot near Haverthwaite and Heath Lane Depot, Lowton. (b) County Surveyor, County Offices, Preston. (c) 2 Gns. (e) Feb. 12.

LEEDS REGIONAL HOSPITAL BOARD. (a) 14 houses at Claypenny Colony, Easingwold, Yorks. (b) Board's Architect, 29-31 Eastgate, Leeds, 2. (c) 2 Gns. (d) Feb. 10. (e) Mar. 5.

LISKEARD R.C. (a) 6 houses at Polperro, and 2 houses at Golberdon. (b) Messrs. Higman & Ford, 2 The Parade, Liskeard. (c) 2 Gns. each site. (e) Feb. 9.

LIVERPOOL C.C. (a) Technical college for women at Colquhitt Street. (b) City Architect, Blackburn Chambers, Dale Street, Kingsway. (c) 2 Gns. (e) Feb. 19.

LIVERPOOL REGIONAL HOSPITAL BOARD. (a) Conversion of The Robert Davies Nursing Home, Eaton Road, as a nurses' home. (b) Regional Architect, Alder Hey Hospital, Liverpool, 12. (c) 2 Gns. (e) Feb. 28.

MANCHESTER C.C. (a) War damage, alterations and adaptations at Lancasterian Day School, Dr. Rhodes' Home, Didsbury. (b) City Architect, Town Hall. (c) 1 Gn. (e) Feb. 12.

NORFOLK C.C. (a) Pair of police houses at Docking. Pair at Hunstanton. Pair at King's Lynn (Newlands Avenue). (b) County Architect, 27 Thorpe Road, Norwich. (e) Feb. 15.

NOTTINGHAM C.C. (a) Alterations to nursery school at Victoria Park, Sneinton. (b) City Engineer, The Guildhall. (c) £2. (e) Feb. 13.

OVERTON R.C. (a) 4 houses at Tallarn Green, Willington. (b) Messrs. H. Anthony Clark, F. C. Roberts & Partners, 41 Regent Street, Wrexham. (c) 2 Gns. (d) Feb. 10.

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OVERTON R.C. (a) 6 houses at Bettisfield site. (b) Messrs. H. Anthony Clark, F. C. Roberts & Partners, 41 Regent Street, Wrexham. (c) 2 Gns. (d) Feb. 10.

PENZANCE B.C. (a) (Contract No. 43) 6 houses. (Contract No. 44) 8 houses, and (Contract No. 45) 16 houses on Alverton Estate. (b) Borough Surveyor, Municipal Buildings. (c) Mar. 19.

POULTON-LE-FYLDE U.C. (a) 25 houses and 28 flats on Garstang Road East Estate. (b) Messrs. Fairbrother, Hall & Hedges, Barclays Bank Chambers, Birley Street, Blackpool. (c) 1 Gn. (e) Mar. 12.

ROCHDALE B.C. (a) Adaptation of Holland Street Mill to form Municipal technical college. (b) Borough Surveyor, Town Hall. (c) 2 Gns. (e) Mar. 1.

SKIPTON U.C. (a) 20 houses on Horse Close Estate. (b) Engineer and Surveyor, Town Hall. (c) 2 Gns. (e) Feb. 26.

SOUTHEND-ON-SEA B.C. (a) Additional classrooms and infants' lavatory at Earls Hall School. (b) Architect to Education Committee, Municipal Buildings (Annexe), 30 Alexandra Street. (c) £2. (e) Feb. 14.

WALLASEY B.C. (a) Shelter and conveniences at Marine Park, New Brighton. (b) Borough Architect, Town Hall. (c) 1 Gn. (e) Feb. 13.

WEST RIDING C.C. (a) Ambulance depot at Dunhill Road, Goole. (b) County Architect, Bishopgarth, Westfield Road, Wakefield. (c) 2 Gns. (e) Feb. 20.

WEST RIDING C.C. (a) Primary school at Sowerby Bridge. (b) County Architect, Bishopgarth, Westfield Road, Wakefield. (c) 2 Gns. (e) Mar. 5.

WEST RIDING C.C. (a) Design, provision and erection of reinforced concrete roofs, floors, beams, etc., at Bretton Hall Training College, near Wakefield. (b) County Architect, Bishopgarth, Westfield Road, Wakefield. (c) 1 Gn. (e) Feb. 12.

PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work, (2) site, (3) name of contractor and address, (4) amount of tender or estimate. † denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

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BRISTOL CORPORATION. (1) 40 houses, 96 flats, 124 Woolway houses. (2) Manor Farm, Horfield. (3) Stone & Co. (Bristol) Ltd., 140 Redland Road, Bristol. (4) £54,332, £103,330 and £138,050.

CARDIFF CORPORATION. (1) New Llan-daff North Secondary School. (2) Bridge Road. (3) McLaughlin & Harvey Ltd., 24 Highbury Grove, London, N.5. (4) £134,945.

CARSHALTON URBAN COUNCIL. (1) 84 flats. (2) Coudson. (3) Cranwell Construction Co. Ltd., Smith Square, London, S.W.1. (4) £108,075.

CARDIFF CORPORATION. (1) New Howardian High School for Boys. (3) E. Taylor & Co. Ltd., Treforest, Pontypridd. (4) £171,877.

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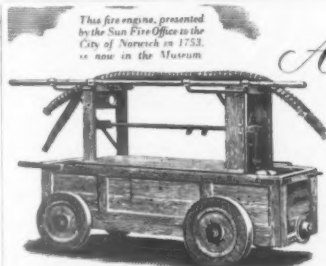
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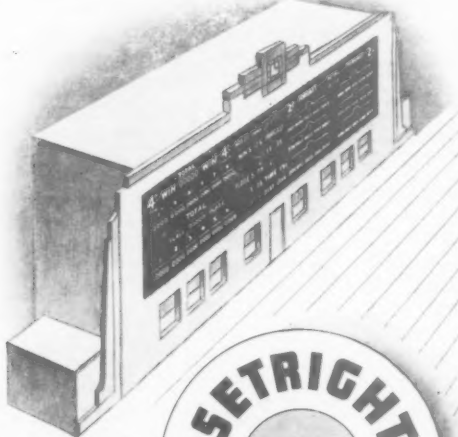


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APPOINTMENTS

LONDON COUNTY COUNCIL.

APPPLICATIONS are invited for positions of **ARCHITECTURAL ASSISTANT** (salaries up to £580 a year) in the Housing and Valuation Department. Commencing salaries will be determined according to qualifications and experience. Engagement will be subject to the Local Government Superannuation Acts, and successful candidates will be eligible for consideration for appointment to the permanent staff on the occurrence of vacancies.

Successful candidates will be required to assist in the design, layout and preparation of working drawings for housing schemes (cottages and multi-storey flats) and will be employed in the Housing Architect's Division.

Forms of application may be obtained from the Director of Housing, The County Hall, Westminster Bridge, S.E.1 (stamped addressed envelope required and quote reference A.A.1). Canvassing disqualified. (516). [5101]

EDINBURGH COLLEGE OF ART

SCHOOL OF ARCHITECTURE.

APPPLICATIONS are invited for the post of **ASSISTANT, Grade II** (full-time) on the Teaching Staff of the College. Salary scale £450-£700 per annum, commencing salary according to qualifications and experience.

Forms of application and conditions of appointment can be obtained from the Secretary, Edinburgh College of Art, Lauriston Place, Edinburgh, 3, and should be returned to him not later than 9th February, 1951. [5160]

BOROUGH OF CHATHAM.

AMENDED ADVERTISEMENT.

APPOINTMENT OF CHIEF ASSISTANT ARCHITECT.

APPPLICATIONS are invited for the appointment of Chief Assistant Architect within Grade VII (E635-£710).

Housing accommodation will be made available if required.

Conditions of appointment and form of application may be obtained from Mr. H. D. Peake, M.Sc. (Eng.), Borough Engineer and Surveyor, Town Hall, Chatham, to whom completed application forms should be returned not later than Wednesday, 14th February, 1951. [5175]

BORDER RURAL DISTRICT COUNCIL.

(AMENDED ADVERTISEMENT)

APPPLICATIONS are invited for the appointment of an **ARCHITECTURAL ASSISTANT** in the Housing Department. The salary will be within the range of Grades II and III of the A.P.T. Division (£420 x £15 per annum - £495) and the appointment will be made at an appropriate point of the scale according to experience.

Candidates should have experience of preparation of plans, specifications and surveying. The appointment will be temporary with a possibility of becoming permanent.

Applications, stating age, qualifications and experience, with copies of two recent testimonials, should be sent to the undersigned not later than Friday, 9th February, 1951.

E. E. HARDING, Clerk to the Council.
Victoria Place, Carlisle. [5201]

COUNTY BOROUGH OF GREAT YARMOUTH.

APPOINTMENT OF CLERK OF WORKS.

APPPLICATIONS are invited for the appointment of **CLERK OF WORKS** to act under the direction of the Borough Engineer in the supervision of the erection of six-storey flats.

Applicants should have a thorough knowledge of the building trade, the erection of multi-storied flats, of steel frame building and pile foundation. Membership of the Incorporated Clerk of Works Association of Great Britain would be an advantage.

The salary will be £12 per week. Applications, stating age, qualifications and previous experience, together with the names of three persons to whom reference may be made should be enclosed in an envelope endorsed "Clerk of Works," and must be received by me not later than Monday, 5th February, 1951.

Canvassing, directly or indirectly, will be deemed a disqualification, and candidates must disclose, in writing, whether, to their knowledge, they are related to any member, or holder of any senior office under the Council. Candidates who fail to do so will be disqualified and, if appointed, will be liable to dismissal without notice.

FARRA CONWAY, Town Clerk.
Town Hall, Great Yarmouth. [5178]
15th January, 1951.

BRACKNELL DEVELOPMENT CORPORATION.

APPPLICATIONS are invited for the following appointment:—

ARCHITECT (Housing). Salary £550 x £40 - £750.

Applicants should be Corporate Members of the R.I.B.A., and an additional town planning qualification will be an advantage.

The successful applicant will be engaged on the design and construction of large housing layouts, and will work under the direction of E. A. Ferry, B.Arch., A.R.I.B.A., A.M.T.P.L., Chief Architect to the Corporation.

The post will be superannuable under the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Applications, giving full particulars of the candidate's age, qualifications and experience, together with the names of two persons to whom reference can be made, must reach the General Manager, Bracknell Development Corporation, Farley Hall, Binfield, Bracknell, Berks, on or before 19th February, 1951, marking envelope "Architect." [5176]

SINGAPORE IMPROVEMENT TRUST.

ASSISTANT ARCHITECT.

AN ASSISTANT ARCHITECT is required for the Permanent Staff of the Singapore Improvement Trust, the appointment being in the first instance on a three years' agreement. Age between 21 and 35 years. Applicants must be qualified by examination as Associates of the Royal Institute of British Architects.

Salary Scale \$500-\$1,000 per month. Point of entry depending on the age, qualifications and experience. Expatriation allowance \$100 to \$150 p.m. according to basic salary. Cost of living allowance at 60 per cent on the first \$200 a month of basic salary plus (i) Single Officers 20 per cent on the next \$500 a month of basic salary, (ii) Married Officers with no dependent children 35 per cent on the next \$500 a month of basic salary, (iii) Married Officers with one or more dependent children 55 per cent on the next \$500 a month of basic salary. One Malayan Dollar equals 2s. 4d. A Married Officer with family on a basic salary of \$500 would, for example, draw salary and allowances equivalent to £1,448 per annum. Allowance will be paid to cover cost of duty transport. All allowances are subject to revision.

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Applications in duplicate with full personal and technical information and copies of three testimonials, to Messrs. Peirce & Williams (Agents to the Trust), 1 Victoria Street, London, S.W.1, before Tuesday, 27th February, 1951. [5202]

NEW ZEALAND.

DUNEDIN CITY COUNCIL require **REGIONAL PLANNING OFFICER**. Salary according to qualifications, experience up to £928 p.a. Closing date for receipt of applications by Council, 28th February, 1951.—For details apply immediately to William Coward & Co. Ltd., 3 St. James's Square, London, S.W.1. [5194]

COUNTY OF LEICESTER.

COUNTY ARCHITECT'S DEPARTMENT.

APPPLICATIONS are invited for the following established posts:—

(a) **ASSISTANT ARCHITECTS, A.P.T. Grade V.** Salary £520-£570.

Candidates should be Registered Architects and preference will be given to Associate Members of the R.I.B.A., who have had good experience in the design and construction of modern buildings.

(b) **ASSISTANT ARCHITECTS, A.P.T. Grade IV.** Salary £480-£525.

ARCHITECTURAL ASSISTANTS, A.P.T. Grade III. Salary £450-£495.

Candidates should be students of the R.I.B.A., experienced in the preparation of working drawings from sketches and capable of taking charge of smaller contracts.

The appointments will be subject to the National Scheme of Conditions of Service and to the provisions of the Local Government Superannuation Act, 1937, and to a satisfactory medical examination.

Applications must be made on the forms to be obtained from the County Architect, T. A. Collins, A.R.I.B.A., 123 London Road, Leicester, to whom they should be returned, accompanied by copies of three recent testimonials, not later than 24th February, 1951.

JOHN A. CHATTERTON.

Clerk of the County Council.
Grey Friars, Leicester. [5196]

THE MINISTRY OF LABOUR AND NATIONAL SERVICE.

NATIONAL SERVICE invites applications for the post of **INTERVIEWING OFFICER** to the Architects' and Surveyors' Section of the Technical and Scientific Register. Applicants must be Registered Architects or qualified Surveyors. Salary range £500-£575 per annum, according to qualifications and experience.

Write for form of application to Ministry of Labour and National Service, Technical and Scientific Register (Section K), York House, Kingsway, London, W.C.2, quoting reference J.6/51. Closing date for receipt of applications, 10th February, 1951. [5189]

CITY OF BIRMINGHAM PUBLIC WORKS DEPARTMENT.

ARCHITECTURAL ASSISTANTS.

APPPLICATIONS are invited for the following appointments in the Architectural Section of the Public Works Department:—

(a) **ARCHITECTURAL ASSISTANTS, Grade A.P.T. IV** (£480-£525).

(b) **ARCHITECTURAL DRAUGHTSMEN, Grade A.P.T. II** (£420-£465).

(c) **JUNIOR ASSISTANTS, General Division.** £245 per annum at 22 years and proceeding by increments of £15 per annum in accordance with age scale.

For architectural post (a) applicants must have passed the Intermediate Examination of the R.I.B.A. or possess equivalent qualifications, and for post (b) the National Certificate (Building) or equivalent qualifications.

For post (c) applicants must have obtained School or Higher School Certificate.

Applicants for post (b) without qualifications but who by their practical experience have fitted themselves to carry out the duties of Architectural Draughtsman, will be paid in accordance with the salary scale £405-£545 per annum.

Applicants need not have had previous Local Government experience.

The successful applicants will be required to obtain their own housing accommodation.

The salaries are in accordance with those laid down under the National Scale of Salaries and the commencing salary (for posts (a) and (b)) will be fixed at an incremental point within the grade according to the qualifications and experience of the candidates appointed.

The appointments may be terminable by one month's notice on either side.

The successful applicants will be required to undergo a medical examination by a Corporation Doctor and the appointments will be subject to a satisfactory probationary period of six months and the provisions of the Local Government Superannuation Act, 1937.

Applications, endorsed with the heading of the post applied for, stating qualifications and experience, together with the names and addresses of two persons to whom reference can be made, should reach the undersigned not later than the 24th February, 1951.

Canvassing either directly or indirectly will disqualify.

HERBERT J. MANZONI.

City Engineer and Surveyor.
The Civic Centre, Birmingham, 1. [5202]

WELSH REGIONAL HOSPITAL BOARD.

APPLICATIONS are invited for the following appointments on the permanent staff of the Architect's Division:

- (a) ONE ASSISTANT ARCHITECT, A.P.T. VIII. Salary £685-£760.
- (b) TWO ASSISTANT ARCHITECTS, A.P.T. VI. Salary £595-£660.
- (c) TWO ASSISTANT ARCHITECTS, A.P.T. III. Salary £450-£495.
- (d) ONE ASSISTANT QUANTITY SURVEYOR, A.P.T. IV. Salary £480-£525.

Candidates for posts (a) and (b) must be Registered Architects and have passed the Final Examination of the Royal Institute of British Architects. They should have had a wide experience in planning and construction and in the preparation of working drawings, etc. Experience in the planning and design of important hospital buildings would be an advantage.

Candidates for (c) should hold the Intermediate Certificate of the Royal Institute of British Architects, should be good draughtsmen and should be accustomed to preparing working and detailed drawings and specifications.

Candidates for (d) should hold the Intermediate Certificate of the Royal Institution of Chartered Surveyors and should have had experience in the preparation of Bills of Materials, detailed estimates of cost and the settling of final accounts.

The above appointments are superannuable, and are terminable by one month's notice on either side.

Applications, stating present appointment, age, qualifications and experience, with the names of two referees, should be addressed to the Secretary of the Board, Temple of Peace and Health, Cathays Park, Cardiff, to reach him not later than February 20, 1951. [5204]

METROPOLITAN BOROUGH OF CAMBERWELL.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF TWO ASSISTANT ARCHITECTS.

APPLICATIONS are invited for the above permanent appointments in Grades A.P.T. V/VI of the National Scale of Salaries. Commencing salary £550 per annum rising to £690 per annum, inclusive of £30 London Weighting.

Applicants should be Registered Architects and have had considerable experience in the design and practical execution of building works.

The appointments are subject to the National Scheme of Conditions of Service, to the provisions of the Camberwell and Other Metropolitan Borough Council's (Superannuation) Act, 1906, as amended, and to the passing of a medical examination by the Council's Medical Officer of Health.

Housing accommodation cannot be provided by the Council.

Applications from staff in the service of other Local Authorities will not be considered unless they have been in the service of their present employers for a period of not less than two years.

Applications on forms to be obtained from the undersigned, must be returned not later than Wednesday, 21st February, 1951.

S. J. HARVEY, Acting Town Clerk
Town Hall, Camberwell, S.E.5. [5200]

LONDON COUNTY COUNCIL.

QUANTITY SURVEYORS' ASSISTANTS required in Housing and Valuation Department for work in connection with development of cottage estates at salaries up to £700 for senior appointments and up to £580 for junior positions, according to qualifications and experience.

Duties include measurement of work in construction of houses, roads and sewers, preparation of interim valuations, measurement and adjustment of sub-contracts, small estimates, measurement of variations.

Forms of application from Director of Housing and Valuer, County Hall, S.E.1. Stamped addressed envelope required. Quote QS-21. (58). [5195]

LONDON COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.

APPLICATIONS are invited for positions of ARCHITECT, Grade III (£550-£700) and TECHNICAL ASSISTANT (up to £580) for work on new housing schools and other public buildings. The positions are superannuable. Candidates for Grade III positions should possess professional qualifications—Application forms from the Architect (AR/P/5), The County Hall, Westminster Bridge, S.E.1, enclosing stamped addressed foolscap envelope. Closing date: (18/2). [10097]

MINISTRY OF WORKS.

SENIOR ARCHITECTURAL ASSISTANTS are required in the Chief Architect's Division who have had first class experience and who are capable of supervising drawing office staffs. Vacancies exist in London, Edinburgh, Newcastle, Leeds, Birmingham, Manchester and Capenhurst (Cheshire). Assistants will be employed on a wide variety of Public Buildings, including Atomic Energy and other research Establishments, Telephone Exchanges, Office Buildings, etc. London salary: £625-£750 per annum. Salary elsewhere is slightly lower.

Although these are not established posts, many have long term possibilities. Apply in writing, giving full details of age, qualifications and experience, to Mr. W. A. Rutter, C.B.E., F.R.I.B.A., Chief Architect, Ministry of Works, Abell House, John Islip Street, Westminster, S.W.1, quoting reference W.G.10/BE. Locality preferred should be stated. [5179]

CONTRACTS

CITY AND COUNTY OF CANTERBURY.

ERECTION OF 18 OLD PEOPLE'S HOMES.

THE Council invites tenders for the erection of two blocks of four and five pairs of OLD PEOPLE'S HOMES at "The Holt," London Road, Canterbury.

Forms of Tender and Bills of Materials may be obtained from the undersigned upon payment of £2 2s. 6d. deposit, which will be refunded upon submission of a bona-fide tender and the return of all documents. Drawings and Conditions of Contract may be inspected at the office of the undersigned.

Sealed tenders, enclosed in the endorsed envelope provided, must be received not later than 12 noon, Thursday, 15th February, 1951.

The Council do not bind themselves to accept the lowest or any tender.

L. HUGH WILSON, City Architect,
Municipal Buildings, Canterbury. [5182]

EXAMINATIONS

I.A.A.S. FORTHCOMING EXAMINATIONS.

THE Incorporated Association of Architects and Surveyors will hold examination in the following sections during the week commencing 28th May, 1951:

Architectural (Intermediate and Final); Quantity Surveying (Intermediate and Final); Building Surveying—Municipal (Intermediate and Final); Building Surveying—Non-Municipal (Intermediate and Final); Fire Surveying (Direct Associateship).

The normal centres for examinations are London, Birmingham, Bristol, Cardiff, Edinburgh, Glasgow, Liverpool, Norwich, Nottingham, Southampton and York.

The closing date for receipt of candidates' applications for permission to sit (which must be made on the prescribed form) will be Monday, 2nd April, 1951.

Copies of syllabuses, application forms and other information are obtainable from the Assistant Secretary, I.A.A.S., 75 Euston Place, London, S.W.1 [5203]

COMPETITION

ARCHITECTURAL COMPETITION.

A FESTIVAL HALL AT HESSWALL FOR THE WIRRAL URBAN DISTRICT COUNCIL.

THE Wirral Urban District Council invite Architects to submit designs in Competition for a Festival Hall to be erected at Hesswall, Wirral, Cheshire.

Assessor: Mr. P. Garland Fairhurst, M.A., F.R.I.B.A.

Premiums: £500, £150, £250.
Last day for submitting designs: 28th April, 1951.
Last day for submitting questions: 6th February, 1951.

Conditions may be obtained on application to: WM. F. ROBERTS,

Clerk of the Council.

Council Offices, Heswall, Wirral, Cheshire. [5115]

LECTURES

UNIVERSITY OF LONDON. A Course of two Lectures entitled "Thoughts on Architecture: Today" will be given by Michael Waterhouse, P.P.R.I.B.A., at 5.30 p.m. on 8th and 15th February, at University of London Senate House (Entrance from Malet Street or Russell Square, W.C.1).

JAMES HENDERSON, Academic Registrar.
ADMISSION FREE WITHOUT TICKET. [5190]

ARCHITECTURAL APPOINTMENTS VACANT

NORMAN A. Dawbarn require an Architectural Assistant of Intermediate Standard. Salary by arrangement.—Apply in writing, stating when available and giving age, particulars of training and experience, to 5 Gower Street, W.C.1. [5174]

APPLICATIONS are invited for position as SENIOR ARCHITECTURAL ASSISTANT in office of Architect, British Railways, King's Cross Station, London, N.1. Applicants should be Associates of R.I.B.A., good contemporary designers, able to take responsibility for day-to-day conduct of major contracts. Salary range £12 to £14 per week according to qualifications and experience. The Department is engaged on design and construction of industrial, commercial and domestic buildings, and offers varied and interesting work.—Applications should be addressed to Civil Engineer, Staff Section, Eastern Region, British Railways, King's Cross Station, London, N.1. [5188]

AN exceptional opportunity exists for experienced and competent Assistant Architects and Architectural Assistants in the Design Section of an organisation currently engaged on a large-scale export programme of prefabricated houses. Initiative, enthusiasm and an ability to work as part of a team are essential attributes.—Applications should be accompanied by full details of experience and qualifications, to Box 8309, The Architect and Building News. [5197]

JUNIOR Architectural Assistant required by firm of West End Architects engaged on hospital, laboratory and other work. 2nd or 3rd year night-school student of recognised Architectural School.—Write Box 8261, The Architect and Building News, or telephone Welbeck 8962. [5192]

ARCHITECTURAL Assistant required, qualified up to Intermediate standard. Some experience in commercial work an asset.—Applications, giving details of age, experience, etc., to be addressed Personnel Officer, Birmingham Co-operative Society Ltd., High Street, Birmingham, 4. [5208]

SITUATIONS VACANT

ARCHITECTURAL Draughtsman required immediately. Interesting work. 5-day week.—Apply in writing, stating age and experience, to the Austin Motor Co. Ltd., Longbridge, Birmingham, (Personnel Dept.). [5158]

AN Architectural Draughtsman is required by the National Gas and Oil Engine Co. Ltd., Ashton-under-Lyne.—Candidates should apply in writing, giving as much information as possible as to previous experience, age, etc., and should address their applications to the Personnel Manager. [5193]

DESIGNER required for drawing office of well-known reinforced concrete flooring contractors.—Apply in writing, stating age, qualifications and experience, to Smith's Fireproof Floors, Timber Court, East Molesey, Surrey. [5198]

ARCHITECTURAL Draughtsman required for Architect's Department of large Iron and Steel Works. Applicants should be aged 22-30 years, should be capable of preparing working drawings with a minimum supervision, sound knowledge of modern construction and building services essential. Some experience of industrial work preferred.—Apply direct to Chief Designing Engineer, Engineering Drawing Office, Appleby-Frodingham Steel Co., Branch of the United Steel Cos. Ltd., Scunthorpe, Lines. [5206]

INSURANCE

ARCHITECTS' Indemnity Insurance effected.—Please write for Proposal Form to

E. J. SAXBY, Incorporated Insurance Broker,
37a Carfax, Horsham, Sussex. Tel. 990. [4960]

MISCELLANEOUS

USE "Watertight" products for Concrete results when concreting. "Liscal," "Quickset," "Surface Dressing." Shopped at most builders' merchants. For particulars apply.—Watertight Cement Co. Ltd., Hulfurhorne, Blackpool, Tel. Poulton-le-Fylde 315. [10078]

SCHOLARSHIPS

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SCHOLARSHIPS.

THE Board of Management may award twelve Junior Open Scholarships of £200 each per annum, tenable for two years at the Edinburgh College of Art, to students who have completed a period of, but not exceeding, two years at any recognised Art Institution and who do not exceed the age of 20 years at 1st October, 1951.

The College incorporates Schools of Architecture, Design and Crafts, Drawing and Painting and Sculpture.

Application forms and further particulars may be obtained from the Secretary, Edinburgh College of Art, Lauriston Place, Edinburgh, 3.

The latest date for receiving applications is 28th February. 15169

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Application forms to reach the College two complete calendar months prior to commencement of course. Applications to The Secretary. Telephone: Western 1546.



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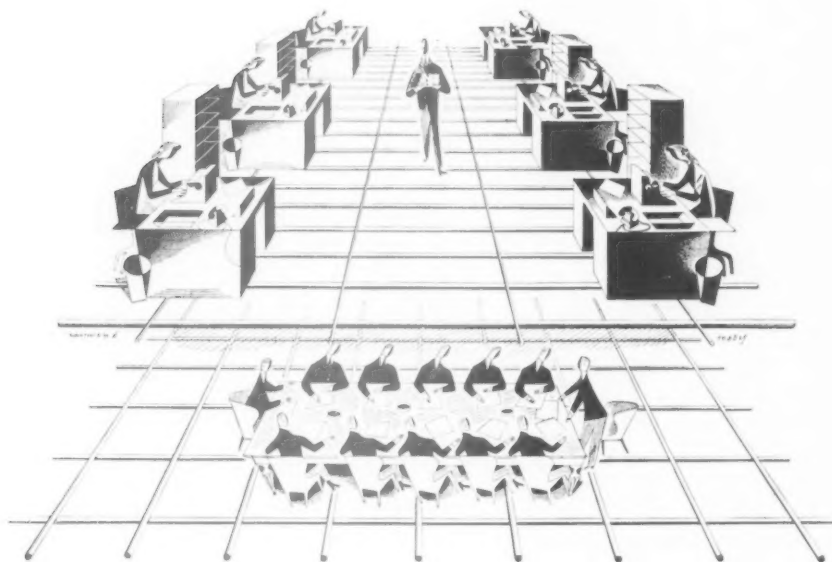
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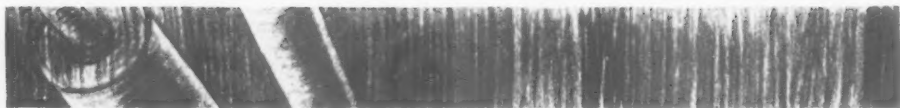


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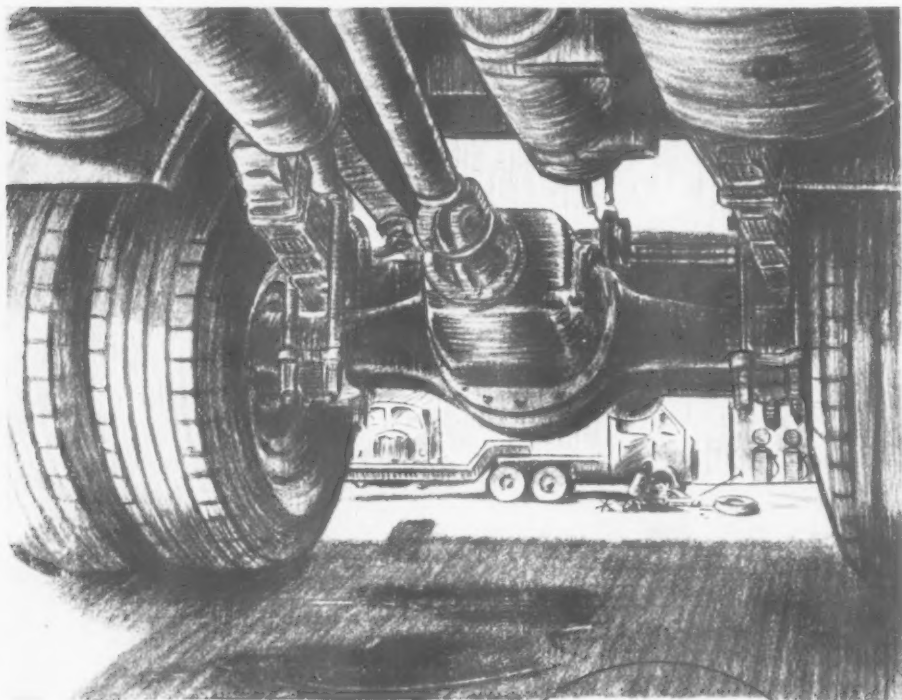
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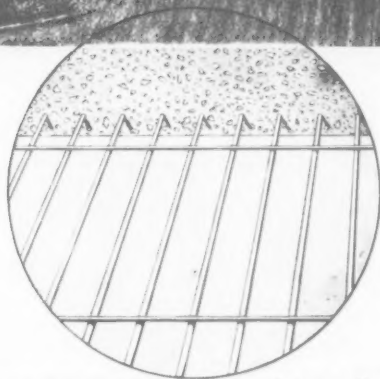
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